

**PRELIMINARY VERSION:
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Determinants of job satisfaction across the EU-15: A comparison of self-employed and paid employees

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Abstract

This paper focuses on job satisfaction of self-employed and paid-employed workers using data from the European Community Household Panel for the EU-15 covering the years 1994-2001. We distinguish between two different types of job satisfaction, i.e. job satisfaction in terms of type of work and job satisfaction in terms of job security. Findings from our generalized ordered logit regressions indicate that self-employed as compared to paid employees are more satisfied with their present job in terms of type of work and less satisfied in terms of job security. The findings also provide insight into the determinants of the two types of job satisfaction for both self-employed and paid employees.

Keywords: entrepreneurship, self-employment, job satisfaction, Europe

JEL-classification: J24, J28, L26, O52

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INTRODUCTION

Entrepreneurship is considered to be an important mechanism for national economic development e.g. through its contribution to the generation of employment and innovation (Acs and Audretsch, 2003; Baumol, 2002; Carree and Thurik, 2003; Schumpeter, 1934). Entrepreneurship as an occupational choice has been the subject of analysis in various theoretical as well as empirical studies. Labor economists commonly equate self-employment with entrepreneurship and analyze occupational choice as the choice between self-employment and paid-employment (Parker, 2004). Occupational choices can be influenced by a broad range of factors including (expected) financial as well as (expected) non-financial benefits. Recent studies emphasize that job satisfaction may be an important determinant of the choice between self- and wage-employment (Taylor, 1996; Blanchflower, 2000, 2004). Hence it is important to gain insight into the determinants of job-satisfaction.

Labor economists have been interested in job satisfaction for many years (Clark, 1966; Hamermesh, 1977; Freeman, 1978; Borjas, 1979; Blanchflower and Oswald, 1990; Meng, 1990; Clark and Oswald, 1992; Clark and Oswald, 1994) and several studies have focused on job satisfaction in relation to self-employment (Blanchflower and Oswald, 1998; Blanchflower, 2000; Hundley, 2001; Benz and Frey, 2004; Noorderhaven et al., 2004). A consistent finding from previous studies is that self-employed tend to have higher levels of job satisfaction than employees. However, such studies have failed to take account of the fact that job satisfaction is a heterogeneous phenomenon that can comprise several elements. Self-reported job satisfaction may reflect satisfaction with both financial and non-financial benefits and different people can mean different things when they evaluate the extent of satisfaction with their job (Muñoz de Bustillo-Llorente and Fernández-Macías, 2005; Bianchi, 2008). For example, if one states to be satisfied with one's job this may reflect satisfaction with the contents of the work or with the number of hours required to do the job. While some individuals may place a high or low value on some specific job-related aspects, which may influence their overall assessment of job satisfaction, for others it will comprise an evaluation of several different aspects. Therefore it is difficult to assess what is actually measured when asking individuals to evaluate satisfaction with their job and consequently there is a lack of understanding what job satisfaction means or refers to and how it can be influenced by policy makers. In this study we will try to take an initial step in overcoming this problem by making a distinction between two types of job satisfaction, i.e. job satisfaction with the type of work and job satisfaction with job security.

In doing so, we first compare self-reported levels of job satisfaction in terms of type of work and job security among self-employed and paid employees. Since autonomy and independence are common motives for becoming self-employed one would expect that self-employed have more freedom in determining the type of work they do and therefore are more likely than employees to be satisfied with their job when it comes to the type of work. However, with respect to job security self-employment can be considered to be more risky than paid-employment as the risk of business failure is higher than the risk of unemployment. Furthermore, self-employment tends to be associated with lower levels of social security protection. Therefore it can be expected that self-employed are less satisfied than paid employees in terms of satisfaction with their present job in terms of job security.

Next, we also investigate the determinants of job satisfaction in terms of the type of work and job security both for self-employed and employees. This allows us to determine whether determinants of the two types of job satisfaction differ between self-employed and paid employees. In our analysis we draw on a unique European dataset, the European Community Household Panel, covering the EU-15 countries for the period 1994-2001.

LITERATURE BACKGROUND

Occupational choice refers to the choice to engage in self-employment or wage-employment. Various factors may affect an individual's decision to become self-employed. These may involve financial considerations such as expected earnings or income, income variability and expected profits but also non-financial considerations such as autonomy, prestige and job satisfaction (Acemoglu, 1995; van Praag, 1999). Verheul, Wennekers, Audretsch and Thurik (2002) view occupational choice decisions as being taken on the basis of an assessment of the potential risks and rewards of both employment options. Individuals compare both the (expected) financial and non-financial risks and rewards of the alternatives. In their assessment, individuals take into account environmental factors (opportunities and opportunity costs) as well as their individual characteristics (means, skills and preferences).

Overall self-employment is associated with lower levels of economic utility than wage employment in the sense that in many cases self-employed could earn higher wages as wage employees (van Praag and Versloot, 2007). Income of self-employed also tends to be more variable than the incomes of paid employees (van Praag and Versloot, 2007). Nevertheless, despite the fact that self-employed may receive lower economic benefits than employees, it has been found that self-employed are more satisfied with their job (Bianchi, 2008). This leads to the suspicion that self-employed are able to obtain greater non-financial benefits as compared to being wage employed such as greater independence or satisfaction. One indicator of non-financial utility that has received considerable attention in previous studies is job satisfaction.

In particular, recent studies emphasize that job satisfaction is an important determinant of the choice between self- and wage-employment (Taylor, 1996; Blanchflower 2000, 2004). Previous studies have found a positive association between self-employment and job satisfaction (Bradley and Roberts, 2004) and that self-employment is related to higher levels of job satisfaction than wage employment (Blanchflower and Oswald, 1998; Blanchflower, 2000). In other words, individuals who work as self-employed tend to be more satisfied with their job than individuals who work as employees. This is attributed to a large part to the strong perception of independence among self-employed (Hyytinen and Ruuskanen, 2006). Also, job dissatisfaction has been found to be a factor that pushes employees into self-employment, in the sense that individuals who are dissatisfied with their job are more likely to seek alternatives to being paid-employed (Brockhaus, 1980).

Job satisfaction broadly refers to the degree to which people like their work. However, job satisfaction is a heterogeneous phenomenon that can comprise several elements. Job satisfaction may assess satisfaction with both financial and non-financial benefits and different people can mean different things when they evaluate the extent of satisfaction with their job. Previous studies have failed to take account of such heterogeneous aspect of job satisfaction and in this paper we try to take a first step in considering the heterogeneity of job satisfaction by distinguishing between two types of job satisfaction: job satisfaction with the type of work and job satisfaction with job security.

We will compare self-reported levels of job satisfaction in terms of type of work and job security among self-employed and paid employees and also investigate determinants of job satisfaction for both groups of workers. Since autonomy and independence are common motives for becoming self-employed one would expect that self-employed have more freedom in determining the type of work they do and therefore are more likely than employees to be satisfied when it comes to the type of work. However, job security can be expected to be lower for self-employed as compared to employees. Self-employed tend to have lower social security or employment protection (European Commission, 2004). Also, for self-employed the risk of failure is quite high, in particular in the start-up phase. Approximately 50% to 60% of new business start-ups survive the first three years of activity (Eurostat, 2004). Overall, the risk of business failure is much higher than the risk of becoming unemployed. Therefore it can be expected that self-employed are less satisfied than paid employees in terms of satisfaction with their present job in terms of job security.

DATA AND METHODOLOGY

In the empirical analysis we use data from the European Community Household Panel (ECHP) for the period 1994-2001. The ECHP is a panel of households covering the EU-15¹ countries. Each year all members of the selected households in the participating countries are interviewed about issues relating to demographics, labor market characteristics, income and living conditions. The fact that data are available for a relatively long period allows us to study the influence of individual-specific characteristics and also to control for changes in the business cycle by including unemployment rates. The same questionnaire is used in all countries, which makes the information directly comparable.

To investigate whether self-employed are more or less satisfied with their job in terms of type of work and job security and to investigate determinants of the two types of job satisfaction among self-employed and employees we use ordered logit models. To avoid violation of the proportional odds assumption (also called parallel regressions assumption, or parallel lines assumption) we apply generalized ordered logit models². Our dependent variables are job satisfaction in terms of type of work and job satisfaction in terms of job security. These variables range from 1 to 6 and equal 1 for individuals who are not satisfied with their present job and 6 for those being fully satisfied with their job. The dependent variable has been reclassified into three values for job satisfaction: (1) dissatisfied, (2) nor dissatisfied, nor satisfied, (3) satisfied. There are two reasons for doing this: first, in most cases, there are only few observations in the low satisfaction scales. A second reason for recoding is that we assume that there is quite a bit of “noise” in detailed scales³.

In the analyses we include a large number of individual-specific independent variables such as demographic indicators (e.g. gender, age), level of education, job status, years of employment experience, hours of work per week, previous spell(s) of unemployment and level of earnings. We control for firm-specific indicators such as firm size and sector of industry. See Appendix B for a full description of the variables that we use.

The generalized ordered logit model that we use can be written as:

$$\Pr(Y_i > j) = g(X\beta_j) = \frac{\exp(\alpha_j + X_i\beta_j)}{1 + \exp(\alpha_j + X_i\beta_j)}, \quad j = 1, 2, \dots, M - 1$$

where M is the number of categories of the ordinal dependent variable. From the above, it can be determined that the probabilities that Y will take on each of the values 1, ... , M is equal to

$$\begin{aligned} \Pr(Y_i = 1) &= 1 - g(X_i\beta_1) \\ \Pr(Y_i = j) &= g(X_i\beta_{j-1}) - g(X_i\beta_j), \quad j = 2, \dots, M - 1 \\ \Pr(Y_i = M) &= g(X_i\beta_{M-1}) \end{aligned}$$

We start with estimations investigating determinants of job satisfaction on our full sample of workers, while including a self-employed dummy taking the value 1 for those being self-employed and taking

¹ Sweden is excluded from the analysis as no information for Sweden is available.

² Different tests of the proportional-odds assumption (whether the coefficients are equal across categories) have been performed for all our estimations (global test of whether any variable violates the parallel lines assumption) All these tests provided evidence that the parallel regression assumption was violated and, as a consequence, demonstrate the need to apply generalized ordered logit models. See Williams (2006) for a complete description of the methodology.

³ Using the much-cited example: people usually know if they are tall or short; they may, however, have difficulties in classifying themselves as very short, or extremely short.

the value 0 for those being wage employed. Next, to explore whether determinants of job satisfaction differ for self-employed and employees, we conduct separate estimations for both groups of workers. The next section will present the main results of our exercises.

RESULTS⁴

Job satisfaction of self-employed versus employees

As a first step we investigate whether self-employed or employees are more likely to be satisfied with their present job both in terms of type of work and job security.

Satisfaction with present job in terms of type of work

Table 1 presents results for satisfaction with the present job in terms of the type of work as the dependent variable including all workers (both self-employed and employees). As expected the self-employment dummy reveals that self-employed are more satisfied with their job in terms of type of work than employees. We observe a 23% increase of the probability of being dissatisfied with the type of work in case of being self-employed and an 11% increase of being satisfied with the type of work.

The findings also illustrate that men are more likely than women to be satisfied with their present job in terms of type of work while being older and being disabled is negatively associated with satisfaction with type of work. We find a positive association between having a larger number of children under 14 and satisfaction with type of work. Furthermore, the findings indicate that education matters in the sense that those who received secondary schooling or university education are more likely to be satisfied with type of work as compared to those without schooling. Other patterns that emerge are that those working in the private sector are less likely to be satisfied with the type of work as compared to those working in the public sector. Also, in comparison to individuals working in the construction sector those working in agriculture are less likely to be satisfied with the type of work. For all other industries we find that individuals who work there are more likely than those working in construction to be satisfied with their type of work. Regarding firm size we find that those working in micro, small and medium-sized firms are more likely to be satisfied with the type of work than those working in large firms (>99 employees). Also, making longer working hours relates positively to being satisfied with the type of work. Those who feel that they have the skills or qualifications to do a more demanding job than they currently display lower levels of satisfaction with the type of work. The same applies to those who have been previously unemployed. Individuals from households that more easily make ends meet and individuals that have higher work incomes display higher levels of satisfaction. Also, countries with higher unemployment rates have higher levels of job satisfaction with respect to type of work. Finally, we have also included country dummies. The results illustrate that workers from Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, the Netherlands and the UK are more likely to be satisfied with the type of work than workers from Spain. The reverse is true for workers from Greece, Italy and Portugal. No significant difference is found between workers from Finland and Spain.

--- Insert Table 1 about here ---

Satisfaction with present job in terms of job security

As explained before, we not only focus on job satisfaction in terms of type of work, but also on satisfaction in terms of job security. Table 2 displays results for satisfaction with the present job in terms of job security as the dependent variable including all workers (both self-employed and

⁴ We just present marginal effects (and do not present coefficients). Each table shows three exits, one per possible level of job satisfaction (1 = dissatisfied, 2 = nor dissatisfied, nor satisfied, 3 = satisfied). Exits show the predicted probabilities of each level of job satisfaction, and their associated marginal effects.

employees). In accordance with our initial expectation we find that self-employed are less likely to be satisfied with their present job in terms of job security than paid employees. Our results show that for self-employed, the probability of being dissatisfied with job security increases with 10%, while the probability of being satisfied with job security decreases with 6%.

A number of other patterns emerge from our findings. Men are less likely to be satisfied in terms of job security than women. Also, being older and being disabled is negatively associated with job satisfaction in terms of job security. Being married and the number of children under 14 is positively related to satisfaction in terms of job security. Furthermore, individuals who received secondary schooling are also more likely to be satisfied with their present job in terms of job security as compared to those who did not receive any schooling. Those working in the private sector are less satisfied than those working in the public sector. Workers in all industries are more likely than workers in construction to be satisfied with their job in terms of job security. Those working in micro firms (0-4) employees are less satisfied than those working in very large firms (>99 employees). People who work longer working hours report higher levels of satisfaction with their job in terms of job security. Furthermore, those who feel that they have the skills or qualifications to do a more demanding job than they currently do report lower levels of satisfaction in terms of job security. The same applies to those who have been previously unemployed. Easiness of households in making ends meet as well as individual work income are positively related to job satisfaction. A country's unemployment rate displays a negative association with job satisfaction in terms of job security. With respect to our country dummies we find that workers in Austria, Denmark, Ireland and the Netherlands are more likely to be satisfied with their job in terms of job security than workers in Spain. The reverse is true for workers from Belgium, Finland, France, Germany, Greece, Italy, Luxembourg, Portugal and the UK.

--- Insert Table 2 about here ---

Determinants of job satisfaction for self-employed and employees

As a second step we explore whether determinants of job satisfaction in terms of both type of work and job security differ for self-employed and employees. To this end we conduct separate estimations for employees and self-employed.

Satisfaction with present job in terms of type of work for paid employees

Table 3 presents the results for determinants of satisfaction with the type of work for paid employees. The findings indicate that gender does not matter in determining job satisfaction with the type of work. Furthermore, we find that older employees and those being disabled are less likely to be satisfied with the type of job than younger ones and those who are not disabled. Those with a larger number of children under 14 display higher levels of satisfaction with the type of work. Those who received secondary schooling or university education are more likely to be satisfied with type of job as compared to those with no schooling. Employees working in the private sector are less likely to be satisfied with their present job in terms of type of work than those working in the public sector. Employees who have a job in agriculture are less likely to be satisfied than those being employed in construction. As compared to employees working in construction, employees in all other industries are more likely to be satisfied with their job in terms of type of work. Both having a supervisory and having an intermediate job status (as compared to having a non-supervisory role) is positively related to being satisfied in terms of type of work. Employees working in micro, small and medium-sized firms are more likely to be satisfied than those working in large firms (>99 employees). Making longer working hours displays a negative association with satisfaction with the type of work. Employees with indefinite contracts display higher levels of satisfaction. Furthermore, those who feel that they have the skills or qualifications to do a more demanding job than they currently do report lower levels of satisfaction with their job in terms of type of work. The same applies to those who have been previously unemployed. Easiness of households in making ends meet as well as households holding the dwelling positively related to job satisfaction. Employees with higher work incomes also report

higher levels of job satisfaction in terms of type of job. Also a country's unemployment rate displays a positive association with job satisfaction in terms of type of work. Finally, with respect to our country dummies we find that paid employees from Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, The Netherlands and the UK are more satisfied with their type of job than those from Spain. The reverse is true for those from Greece, Italy and Portugal. No significant difference is found between Finland and Spain.

--- Insert Table 3 about here ---

Satisfaction with present job in terms of type of work for self-employed

We now explore the determinants of satisfaction with the present job in terms of type of work for self-employed. The results are given in Table 4. Again, similar as in case of employees, we find that gender has no impact on satisfaction in terms of type of work. Furthermore, in line with the findings for all workers and for paid employees we find that older and disabled individuals display lower levels of satisfaction with their present job in terms of type of work. While the number of children was important as a determinant for satisfaction with the type of work among paid employees this variable does not matter for self-employed. Comparably to the results for paid employees we find that those who received secondary schooling and university education are more likely to be satisfied with the type of work as compared to those who did not receive any schooling. Self-employed individuals working in agriculture are less likely to be satisfied with the type of work than those working in construction. Self-employed in all other industries (except for those working in wholesale, hotels, restaurants and transport) are more likely than self-employed in construction to be satisfied with their type of job. While firm size plays a role in determining satisfaction with the type of work among employees we find that firm size does not matter so much for determining satisfaction with the type of work among self-employed. Thus, we just observe as own-account workers are less likely to be satisfied than employers. Whereas making longer working was negatively associated with satisfaction with the type of work among employees, for self-employed we find that those making longer working hours are more satisfied with their type of work. Furthermore, we find that self-employed who feel that they have the skills or qualifications to do a more demanding job than they currently do are not more or less likely to be satisfied with their job in terms of type of work while this had a negative impact for paid employees. In line with the results for paid employees we find that self-employed who have been previously unemployed display lower levels of satisfaction with their job in terms of type of work. Easiness of households in making ends meet as well as own-account work incomes are positively related to job satisfaction. However for households owning the dwelling we find a negative association with job satisfaction in terms of type of work. As was the case for paid employees the results for self-employed indicate that a country's unemployment rate displays a positive association with job satisfaction in terms of type of work. Finally, with respect to our country dummies we find that self-employed individuals from Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, The Netherlands and the UK are more satisfied with their type of job than those from Spain. The reverse is true for those from Greece, Italy and Portugal.

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Satisfaction with present job in terms of job security for paid employees

In addition to determinants of satisfaction with type of work we also investigate determinants of satisfaction in terms of job security for both paid employees and self-employed. Table 5 presents the results for paid employees. We find that men are less likely than women to be satisfied with their job in terms of job security. Furthermore, older and disabled individuals display lower levels of satisfaction with their present job in terms of job security. Married individuals are more likely than those who are not married to be satisfied with their job in terms of job security. Employees who received university education are more likely to be satisfied with job security as compared to those who received no schooling at all. Employees working in the private sector are less likely to be satisfied than those working in the public sector. Paid employees in all industries are more likely than those

working in construction to be satisfied with their job in terms of job security. Both having a supervisory and having an intermediate job status (as compared to having a non-supervisory job position) is positively related to job satisfaction in terms of job security. Furthermore, making longer working hours and having a fulltime job is negatively associated with satisfaction in terms of job security. Having an indefinite contract is positively related to job satisfaction in terms of job security. Those who feel that they have the skills or qualifications to do a more demanding job than they currently do display lower levels of satisfaction in terms of job security. The same applies to those who have been previously unemployed. Easiness in making ends meet and work incomes are positively related to job satisfaction in terms of job security. A country's unemployment rate displays a negative association with job satisfaction in terms of job satisfaction. Paid employees in Austria and Ireland are more likely to be satisfied with their job in terms of job security than employees in Spain. The reverse is true for employees from Belgium, Finland, France, Germany, Greece, Italy, Luxembourg, The Netherlands, Portugal and the UK. No significant difference between Denmark and Spain.

--- Insert Table 5 about here ---

Satisfaction with present job in terms of job security for self-employed

As a final exercise we explore determinants of satisfaction with the present job in terms of job security among self-employed. The results are reported in Table 6. Men are less likely than women to be satisfied with their job in terms of job security. Furthermore, older and disabled report lower levels of satisfaction with their job in terms of job security. Education has no impact. Self-employed in all industries are more likely than those in construction to be satisfied with their job in terms of job security. Self-employed individuals working in firms with more than four employees are more likely to be satisfied in terms of job security than self-employed of smaller firms (0-4 employees). While making longer working hours is negatively related to satisfaction with job security among employees, self-employed who make longer working hours display higher levels of satisfaction with job security. In line with the results for employees we find that self-employed who feel that they have the skills or qualifications to do a more demanding job than they currently do display lower levels of satisfaction with their job in terms of job security. The same applies to those who have been previously unemployed. Easiness in making ends meet, as well as households owning the dwelling and work incomes are positively related to job satisfaction in terms of job security. A country's unemployment rate displays a negative association with job satisfaction in terms of job satisfaction, but this result is not significant (or only weakly significant at 10%). Self-employed in Austria, Denmark, Ireland and the Netherlands are more likely to be satisfied with their job in terms of job security than self-employed in Spain. The reverse is true for self-employed from Belgium, France, Germany, Greece, Italy, Luxembourg, Portugal and the UK. No significant difference is found between Finland and Spain.

--- Insert Table 6 about here ---

CONCLUSION AND DISCUSSION

In this paper we investigate whether self-employed display different levels of job satisfaction than employees and we also compare determinants of job satisfaction among self-employed and employees. Whereas previous studies have mainly dealt with job satisfaction as a homogeneous phenomenon we distinguish between different types of job satisfaction, i.e. job satisfaction in terms of type of work and job satisfaction in terms of job security. By distinguishing these two types of job satisfaction our study provides more detailed insight into the determinants of job satisfaction among self-employed and wage employees.

As expected we find that self-employed are more satisfied than paid employees with the type of work and less satisfied with their job in terms of job security. These findings suggest that perceptions of the

type of work may positively influence the choice for individuals to engage in self-employment, whereas perceptions about job security potentially hinder entry into self-employment. Overall, these findings illustrate that to understand what job satisfaction captures it is important to distinguish between several aspects of job satisfaction.

A consistent finding among both self-employed and employees is that older individuals, disabled people (i.e. individuals who have a chronic, physical or mental health problem, illness or disability) and those who have experienced previous spells of unemployment tend to be less satisfied with their jobs both in terms of type of work and job security. Possibly these groups of individuals have more limited choices to find satisfying jobs and also are more aware of the risks of losing one's job.

We also consistently find that individuals (both self-employed and employees) from households that have greater easiness in making ends meet and higher levels of work income report higher levels of job satisfaction in terms of type of work and job security. Thus, an individual's financial position is associated with the evaluation of one's current job in terms of type of work and job security in the sense that people with more favorable financial positions are more satisfied with their jobs.

Education matters among both paid employees and self-employed for determining satisfaction with the type of work. More specifically, those who received secondary schooling or university education are more likely to be satisfied with their type of job as compared to those who received no schooling at all. Education seems to play a less important role in determining job satisfaction in terms of job security, in particular for self-employed this variable has no impact. Possibly higher education increases the opportunities for individuals to find an interesting job in terms of the type of work, while the extent of job security is more likely to be determined by institutional systems and therefore choices to find jobs with higher levels of perceived job security cannot so much be influenced through education.

For all workers and paid employees we consistently find that those who work in the private sector are less satisfied with their job both in terms of type of job and job security than those working in the public sector. We also find among paid employees that having a supervisory or an intermediate job status (as opposed to having a non-supervisory job status) is associated with higher levels of job satisfaction. This is not surprising as people with supervisory roles are likely to have more freedom in determining the type of work they (and others) do and also may have more stable or established positions within firms.

A country's unemployment rate relates positively to job satisfaction in terms of type of work, while it relates negatively to satisfaction in terms of job security. The first findings may reflect that in case of high unemployment rates people may simply be happy not to be unemployed and therefore report higher levels of satisfaction with the type of work. The latter finding may reveal that when unemployment rates are higher, job conditions may worsen and people may also be more aware of the risk of losing one's job and hence report lower levels of satisfaction with their job in terms of job security.

For job satisfaction with type of work we find some interesting differences between self-employed and paid employees. For example, while for employees firm size matters in determining job satisfaction in the sense that those working in micro-, small-, and medium-sized firms are more likely to be satisfied with the type of work than those working in larger firms. This may signal that employees in smaller firms may have more freedom in determining the type of work they do than those in larger firms. For self-employed, however, we observe as own-account workers are less likely to be satisfied than their employers counterparts, which might be indicative of success. Also, for self-employed we find that those who feel that they have the skills or qualifications to do a more demanding job than they currently do are not more or less likely to be satisfied with their job in terms of type of work while this aspect decreases job satisfaction for paid employees. Finally, we observe that workers in agricultural sector are less satisfied than workers for other industries. Thus, agriculture is perceived as a less pleasant activity.

With respect to satisfaction in terms of job security we find that workers (both self-employed and wage employees) in all industries are more likely than those working in construction to be satisfied with their job in terms of job security. Thus, workers perceive construction as a particularly unfavorable industry when it comes to job security. Also, for both self-employed and paid employees we find that those who feel that they have the skills or qualifications to do a more demanding job than they currently do display lower levels of satisfaction with their job in terms of job security. Firm size does not matter for determining job satisfaction with job security for paid employees, while self-employed of micro- or small firms are more likely to be satisfied with their job in terms of job security than those being self-employed of large firms (firms with more than 99 employees).

Regarding working hours we find both for job satisfaction in terms of type of work and in terms of job security that among paid employees those making longer working hours are less satisfied with their job, while we find that among self-employed making longer working hours is associated with higher levels of job satisfaction. Possibly making longer working hours is more of a free choice for self-employed than for employees.

We acknowledge several limitations of our study. For example, we rely on self-reported measures of job satisfaction derived from answers to subjective questions that may be perceived differently by people in different countries (Lévy-Garboua and Montmarquette, 2004; Kristensen and Johansson, 2008). Blanchflower and Freeman (1994) stress that people in one country may “scale” responses differently than those in another. For instance, Americans may be relatively optimistic, with an “everything will work out” mentality that leads people with the same true satisfaction on some objective scale to respond more positively to a “Are you satisfied with your job?” question than the potentially more reserved British. Furthermore, the current analysis does not allow us to disentangle directions of causality. Also, we only focus on entrepreneurship in terms of self-employment and do not distinguish between several engagement levels (Grilo and Thurik, 2008).

We would like to highlight a number of avenues for future research. It could be interesting, for example, to explore whether higher levels of job satisfaction are associated with higher levels of economic utility over time or not. It could also be interesting to disentangle more aspects of job satisfaction than the current study takes into account. In this respect one could think of satisfaction with the present job in terms financial benefits or in terms of working conditions. In investing determinants of job satisfaction for self-employed it might also be worthwhile to consider an individual’s start-up motivation.

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Appendix A: Tables

Table A1. Job satisfaction with type of work for all workers

Generalized Ordered Logit															
-Job Satisfaction with TYPE OF WORK FOR ALL WORKERS-															
248692															
73462															
Number of observations	...job satisfaction = 1: 16660 (6.7%)				...job satisfaction = 2: 98228 (39.5%)				...job satisfaction = 3: 133804 (53.8%)						
Number of individuals	Prob (Job Satisfaction = 1) = 0.0467				Prob (Job Satisfaction = 2) = 0.4083				Prob (Job Satisfaction = 3) = 0.545						
Variables	dy	(dy/y)	dx	t-stat.	Mean	dy	(dy/y)	dx	t-stat.	Mean	dy	(dy/y)	dx	t-stat.	Mean
Self-employment															
Self-employed ⁽¹⁾	-0.0106	-22.7%	-13.1***	0.25		-0.0518	-12.7%	-12.3***	0.22		0.0624	11.4%	12.44***	0.2	
Demographic characteristics															
Male	-0.0015	-3.3%	-2.42**	0.62		-0.007	-1.7%	-2.43**	0.62		0.0086	1.6%	2.43**	0.61	
Age	-0.0002	-0.5%	-0.82	38.4		0.0031	0.8%	3.35***	38.8		-0.0029	-0.5%	-2.85***	39.3	
Age (squared)	2E-06	0%	0.53	1613		-4E-05	0%	-3.58***	1634		4E-05	0%	3.17***	1663	
Cohabiting ⁽²⁾	-0.001	-2%	-1.37	0.68		-0.0043	-1.1%	-1.37	0.72		0.0053	1%	1.37	0.75	
Number of children under 14	-0.0008	-1.7%	-2.42**	0.57		-0.0036	-0.9%	-2.42**	0.6		0.0044	0.8%	2.42**	0.63	
Health															
Disabled	0.0144	30.8%	8.75***	0.13		0.0136	3.3%	3.39***	0.12		-0.028	-5.1%	-6.52***	0.12	
Education															
Secondary education ⁽³⁾	-0.0128	-27.5%	-12.9***	0.3		-0.0483	-11.8%	-14.8***	0.31		0.0612	11.2%	17.2***	0.38	
University studies ⁽³⁾	-0.017	-36.4%	-24.7***	0.12		-0.087	-21.3%	-23.1***	0.15		0.104	19.1%	23.54***	0.23	
Employment characteristics															
Private sector ⁽⁴⁾	0.0139	29.9%	9.55***	0.88		0.0174	4.3%	3.71***	0.83		-0.0313	-5.8%	-6.24***	0.77	
Agricultural sector ⁽⁵⁾	0.0353	75.7%	12.22***	0.17		0.0481	11.8%	7.23***	0.1		-0.0835	-15.3%	-10.9***	0.06	
Industrial sector ⁽⁵⁾	-0.0047	-1.0%	-4.73***	0.22		-0.022	-5.4%	-4.6***	0.23		0.0267	4.9%	4.62***	0.21	
Financial services ⁽⁵⁾	-0.0092	-19.7%	-8.67***	0.07		-0.0457	-11.2%	-8.02***	0.09		0.0549	10.1%	8.13***	0.11	
Wholesale, hotels, restaurants & transport ⁽⁵⁾	-0.0086	-18.4%	-6.59***	0.25		-0.0255	-6.2%	-5.05***	0.26		0.0341	6.3%	5.95***	0.23	
Other services ⁽⁵⁾	-0.0108	-23.2%	-6.74***	0.18		-0.0938	-23%	-16.5***	0.22		0.1047	19.2%	16.24***	0.3	
Micro firm (1-4 emp.) ⁽⁶⁾	-0.0072	-15.5%	-8.51***	0.41		-0.0341	-8.3%	-8.3***	0.34		0.0413	7.6%	8.35***	0.28	
Small firm (5-19 emp.) ⁽⁶⁾	-0.01	-21.3%	-9.6***	0.31		-0.0347	-8.5%	-9.83***	0.35		0.0447	8.2%	11.28***	0.35	
Medium firm (20-99 emp.) ⁽⁶⁾	-0.0033	-7%	-3.64***	0.08		-0.0155	-3.8%	-3.54***	0.09		0.0188	3.4%	3.56***	0.09	
Hours of work	3E-08	0%	0.01	41.31		-0.0015	-0.4%	-9.71***	41.3		0.0015	0.3%	8.91***	41.21	
Full-time workers (at least 30h.) ⁽⁷⁾	-0.0138	-29.6%	-5.81***	0.9		0.0191	4.7%	3.33***	0.93		-0.0052	-1%	-0.85	0.91	
Other characteristics															
Better skilled	0.0199	42.5%	21.59***	0.58		0.0391	9.6%	14.75***	0.51		-0.0589	-10.8%	-21.1***	0.5	
Observed previous experience															
Previous spell(s) as unemployed	0.0118	25.3%	9.8***	0.34		0.0254	6.2%	7.47***	0.26		-0.0372	-6.8%	-10.1***	0.21	
Incomes															
Ends meet	-0.0144	-30.8%	-32.7***	2.86		-0.0315	-7.7%	-24.6***	3.24		0.0459	8.4%	33.57***	3.72	
Dwelling owner	-0.0042	-8.9%	-3.72***	0.74		0.0019	0.5%	0.58	0.75		0.0022	0.4%	0.63	0.76	
Annual earnings t-1 (x 10 ⁻³)	-0.0012	-2.5%	-13.1***	9,233€		-0.0029	-0.7%	-14.7***	10,793€		0.004	0.7%	18.7***	14,063€	
Business cycle															
Annual unemployment rate	-0.0004	-0.9%	-2.44**	10.4		-0.0051	-1.3%	-9.02***	9.03		0.0055	1%	8.5***	8.53	
Country															
Austria ⁽⁸⁾	-0.0386	-82.6%	-48.1***	0.03		-0.255	-62.5%	-42.2***	0.04		0.2936	53.9%	43.97***	0.12	
Belgium ⁽⁸⁾	-0.0096	-20.5%	-7.24***	0.03		-0.0484	-11.9%	-6.58***	0.03		0.058	10.6%	6.69***	0.05	
Denmark ⁽⁸⁾	-0.0265	-56.7%	-26.4***	0.02		-0.1617	-39.6%	-21.1***	0.03		0.1882	34.5%	21.88***	0.06	
Finland ⁽⁸⁾	-0.0199	-42.5%	-13.3***	0.04		0.0147	3.6%	2.27**	0.07		0.0052	1%	0.74	0.07	
France ⁽⁸⁾	-0.0238	-50.9%	-28.1***	0.02		-0.1418	-34.7%	-23.4***	0.02		0.1656	30.4%	24.11***	0.04	
Germany ⁽⁸⁾	-0.0203	-43.6%	-6.83***	0.003		-0.1188	-29.1%	-5.41***	0.001		0.1392	25.5%	5.58***	0.001	
Greece ⁽⁸⁾	0.0135	28.8%	6.99***	0.22		0.1769	43.3%	30.25***	0.14		-0.1904	-34.9%	-28.9***	0.06	
Ireland ⁽⁸⁾	-0.0273	-58.4%	-32.1***	0.03		-0.1663	-40.7%	-26.4***	0.04		0.1936	35.5%	27.32***	0.07	
Italy ⁽⁸⁾	0.014	29.9%	8.04***	0.25		0.0361	8.8%	6.91***	0.17		-0.05	-9.2%	-8.32***	0.14	
Luxembourg ⁽⁸⁾	-0.0250	-53.5%	-14.2***	0.003		-0.1546	-37.9%	-10.8***	0.004		0.1796	33%	11.16***	0.007	
Netherlands ⁽⁸⁾	-0.0288	-61.6%	-29.3***	0.05		-0.1708	-41.8%	-24.5***	0.07		0.1996	36.6%	25.32***	0.13	
Portugal ⁽⁸⁾	-0.0424	-90.7%	-38.6***	0.08		0.1478	36.2%	18.4***	0.23		-0.1054	-19.3%	-12.5***	0.09	
Sweden ⁽⁸⁾			<i>No observations</i>					<i>No observations</i>					<i>No observations</i>		
United Kingdom ⁽⁸⁾	0.0015	3.1%	0.49	0.02		-0.0656	-16.1%	-7.22	0.02		0.0642	11.8%	6.32***	0.02	
Reference categories: (1) Paid-employed, (2) Non-cohabiting individuals, (3) No education or primary education, (4) Public sector, (5) Construction sector, (6) Large firm (> 99 employees), (7) Not full-time worker (< 30 hours), (8) Spain															
Log pseudolikelihood															

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Table A2. Job satisfaction with job security for all workers

Generalized Ordered Logit															
-Job Satisfaction with JOB SECURITY FOR ALL WORKERS-															
248468															
73432															
Number of observations when... ..job satisfaction = 1: 30573 (12.3%)															
...job satisfaction = 2: 95870 (38.6%)															
...job satisfaction = 3: 122025 (49.1%)															
Prob (Job Satisfaction = 1) = 0.0973															
Prob (Job Satisfaction = 2) = 0.4114															
Prob (Job Satisfaction = 3) = 0.4913															
Variables	dy	(dy/y)	dx	t-stat.	Mean	dy	(dy/y)	dx	t-stat.	Mean	dy	(dy/y)	dx	t-stat.	Mean
Self-employment															
Self-employed ⁽¹⁾	0.0099	10.12%	5.14***	0.25		0.0174	4.24%	5.38***	0.25		-0.0273	-5.55%	-5.3***	0.17	
Demographic characteristics															
Male	0.0056	5.72%	4.63***	0.61		0.0104	2.52%	4.58***	0.63		-0.0159	-3.24%	-4.6***	0.60	
Age	0.0014	1.48%	3.09***	37.97		0.0056	1.36%	6.39***	38.62		-0.007	-1.43%	-6.92***	39.63	
Age (squared)	-2E-05	-0.02%	-3.13***	1570		-0.0001	-0.02%	-7.04***	1619		0.0001	0.02%	7.56***	1691	
Cohabiting ⁽²⁾	-0.009	-9.27%	-6.57***	0.68		-0.0161	-3.92%	-6.78***	0.72		0.0252	5.12%	6.71***	0.76	
Number of children under 14	-0.0013	-1.3%	-1.99**	0.6		-0.0023	-0.57%	-1.99**	0.6		0.0036	0.73%	1.99**	0.62	
Health															
Disabled	0.0163	16.74%	7.27***	0.13		0.0020	0.5%	0.54	0.11		-0.0183	-3.73%	-4.27***	0.12	
Education															
Secondary education ⁽³⁾	-0.007	-7.17%	-4.32***	0.32		-0.0019	-0.46%	-0.63	0.32		0.0089	1.81%	2.48**	0.38	
University studies ⁽³⁾	-0.0003	-0.27%	-0.16	0.17		-0.0005	-0.12%	-0.16	0.16		0.0007	0.15%	0.16	0.23	
Employment characteristics															
Private sector ⁽⁴⁾	0.012	12.32%	5.19***	0.86		0.1254	30.49%	29.97***	0.87		-0.1374	-27.97%	-28.1***	0.73	
Agricultural sector ⁽⁵⁾	-0.0121	-12.38%	-4.25***	0.11		-0.0701	-17.03%	-10.9***	0.1		0.0821	16.71%	10.65***	0.07	
Industrial sector ⁽⁵⁾	-0.0251	-25.83%	-14.2***	0.21		-0.0513	-12.46%	-12.9***	0.23		0.0764	15.55%	13.36***	0.2	
Financial services ⁽⁵⁾	-0.0313	-32.13%	-16.9***	0.08		-0.0692	-16.82%	-14.4***	0.09		0.1005	20.45%	15.13***	0.11	
Wholesale, hotels, restaurants & transport ⁽⁵⁾	-0.0403	-41.45%	-20.8***	0.23		-0.0634	-15.4%	-13.6***	0.27		0.1037	21.11%	17.98***	0.23	
Other services ⁽⁵⁾	-0.0356	-36.53%	-15.1***	0.22		-0.1029	-25.02%	-19.9***	0.2		0.1385	28.19%	21.34***	0.32	
Micro firm (1-4 emp.) ⁽⁶⁾	0.0115	11.83%	6.45***	0.4		0.0206	5%	6.67***	0.36		-0.0321	-6.53%	-6.6***	0.24	
Small firm (5-19 emp.) ⁽⁶⁾	-0.0015	-1.54%	-0.87	0.33		-0.0042	-1.02%	-1.34	0.35		0.0057	1.16%	1.45	0.35	
Medium firm (20-99 emp.) ⁽⁶⁾	-0.0013	-1.35%	-0.71	0.08		-0.0024	-0.59%	-0.71	0.08		0.0038	0.76%	0.71	0.1	
Hours of work	-0.0004	-0.44%	-5.1***	40.62		-0.0009	-0.22%	-5.91***	41.92		0.0013	0.27%	7.7***	40.88	
Full-time workers (at least 30h.) ⁽⁷⁾	-0.0235	-24.17%	-7.01***	0.89		0.0164	3.98%	3.01***	0.93		0.0072	1.46%	1.16	0.92	
Other characteristics															
Better skilled	0.0175	18.02%	12.84***	0.55		0.0004	0.10%	0.16	0.49		-0.0179	-3.65%	-6.37***	0.51	
Observed previous experience															
Previous spell(s) as unemployed	0.0479	49.26%	23.98***	0.37		0.0408	9.92%	12.74***	0.25		-0.0888	-18.07%	-24.2***	0.19	
Incomes															
Ends meet	-0.0287	-29.52%	-43.4***	2.96		-0.0287	-6.99%	-23.4***	3.27		0.0575	11.7%	41.31***	3.76	
Dwelling owner	-0.0089	-9.11%	-5.22***	0.72		0.0029	0.71%	0.93	0.75		0.0059	1.21%	1.66*	0.77	
Annual earnings t-1 (x 10 ⁻³)	-0.0033	-3.37%	-24.8***	8,968€		-0.0023	-0.57%	-11.5***	10,924€		0.0056	1.14%	22.84***	14,519€	
Business cycle															
Annual unemployment rate	0.0026	2.72%	9.89***	10.19		0.0042	1.03%	8.62***	8.91		-0.0069	-1.4%	-10.6***	8.48	
Country															
Austria ⁽⁸⁾	-0.0384	-39.43%	-15.8***	0.04		-0.0895	-21.75%	-12.7***	0.05		0.1278	26.02%	13.49***	0.13	
Belgium ⁽⁸⁾	0.03	30.84%	7.82***	0.04		0.0456	11.08%	9.66***	0.04		-0.0756	-15.38%	-8.85***	0.05	
Denmark ⁽⁸⁾	-0.0127	-13.02%	-3.83***	0.03		-0.0254	-6.18%	-3.52***	0.03		0.0381	7.76%	3.62***	0.06	
Finland ⁽⁸⁾	-0.0079	-8.11%	-2.6***	0.06		0.0318	7.73%	5.53***	0.06		-0.0239	-4.86%	-3.42***	0.07	
France ⁽⁸⁾	0.0526	54.04%	14.17***	0.05		0.069	16.77%	20.83***	0.04		-0.1216	-24.75%	-17.5***	0.03	
Germany ⁽⁸⁾	0.0538	55.24%	4.17***	0.003		0.0685	16.66%	6.48***	0.002		-0.1223	-24.89%	-5.22***	0.002	
Greece ⁽⁸⁾	0.0105	10.75%	3.6***	0.16		0.1741	42.32%	34.74***	0.13		-0.1845	-37.56%	-30.3***	0.07	
Ireland ⁽⁸⁾	-0.0207	-21.3%	-8.47***	0.05		-0.0437	-10.64%	-7.43***	0.04		0.0645	13.12%	7.74***	0.07	
Italy ⁽⁸⁾	0.0226	23.19%	7.96***	0.2		0.0873	21.22%	19.4***	0.16		-0.1099	-22.36%	-18.9***	0.14	
Luxembourg ⁽⁸⁾	0.0158	16.22%	2.11*	0.003		0.0261	6.33%	2.37**	0.004		-0.0418	-8.52%	-2.27**	0.007	
Netherlands ⁽⁸⁾	0.0015	1.52%	0.44	0.06		0.0027	0.66%	0.44	0.07		-0.0042	-0.85%	-0.44	0.14	
Portugal ⁽⁸⁾	-0.0565	-58.04%	-24.6***	0.09		0.3217	78.2%	54.3***	0.24		-0.2652	-53.98%	-37.9***	0.08	
Sweden ⁽⁸⁾			No observations					No observations					No observations		
United Kingdom ⁽⁸⁾	0.0555	57.02%	8.08***	0.02		0.0504	12.26%	6.14***	0.02		-0.1059	-21.56%	-10.5***	0.02	

Reference categories: (1) Paid-employed, (2) Non-cohabiting individuals, (3) No education or primary education, (4) Public sector, (5) Construction sector, (6) Large firm (> 99 employees), (7) Not full-time worker (< 30 hours), (8) Spain

Log pseudolikelihood -217129.5

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Table A3. Job satisfaction with type of work for paid-employed individuals

Generalized Ordered Logit												
-Job Satisfaction with TYPE OF WORK FOR PAID-EMPLOYED INDIVIDUALS-												
197446												
62876												
Number of observations when... ..job satisfaction = 1: 12541 (6.3%)												
...job satisfaction = 2: 76747 (38.9%)												
...job satisfaction = 3: 108158 (54.8%)												
Prob (Job Satisfaction = 1) = 0.0433												
Prob (Job Satisfaction = 2) = 0.4												
Prob (Job Satisfaction = 3) = 0.5567												
Variables	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean
Demographic characteristics												
Male	0.0009	2%	1.34	0.59	0.0043	1.1%	1.33	0.59	-0.0052	-0.9%	-1.34	0.58
Age	0.0002	0.5%	0.73	36.2	0.0072	1.8%	6.75***	37.2	-0.0074	-1.3%	-6.46***	38.3
Age (squared)	-2E-06	0%	-0.48	1432	-9E-05	0%	-6.51***	1505	9E-05	0%	6.18***	1582
Cohabiting ⁽¹⁾	-0.0008	-1.9%	-1.16	0.64	-0.004	-1%	-1.17	0.69	0.0048	0.9%	1.17	0.73
Number of children under 14	-0.0006	-1.5%	-1.87*	0.57	-0.0031	-0.8%	-1.87*	0.6	0.0038	0.7%	1.87*	0.62
Health												
Disabled	0.0161	37.1%	9.08***	0.13	0.0104	2.6%	2.33**	0.12	-0.0265	-4.8%	-5.57***	0.12
Education												
Secondary education ⁽²⁾	-0.0088	-20.4%	-8.35***	0.33	-0.0298	-7.4%	-8.26***	0.34	0.0386	6.9%	9.87***	0.4
University studies ⁽²⁾	-0.0093	-21.4%	-11.9***	0.14	-0.0489	-12.2%	-11.4***	0.17	0.0582	10.5%	11.48***	0.24
Employment characteristics												
Private sector ⁽³⁾	0.012	27.7%	8.24***	0.84	0.0201	5%	4.22***	0.78	-0.0321	-5.8%	-6.31***	0.72
Agricultural sector ⁽⁴⁾	0.0185	42.8%	5.63***	0.06	-0.015	-3.7%	-1.5	0.03	-0.0036	-0.6%	-0.32	0.02
Industrial sector ⁽⁴⁾	-0.0019	-4.5%	-1.85**	0.27	-0.0097	-2.4%	-1.83*	0.27	0.0116	2.1%	1.83*	0.23
Financial services ⁽⁴⁾	-0.0048	-11%	-4.04***	0.08	-0.0246	-6.2%	-3.88***	0.09	0.0294	5.3%	3.9***	0.11
Wholesale, hotels, restaurants & transport ⁽⁴⁾	-0.0062	-14.3%	-6.19***	0.24	-0.0319	-8%	-5.97***	0.24	0.0381	6.8%	6.01***	0.22
Other services ⁽⁴⁾	-0.0093	-21.5%	-5.85***	0.23	-0.0837	-20.9%	-13.5***	0.27	0.093	16.7%	13.18***	0.34
Supervisory ⁽⁵⁾	-0.0186	-42.9%	-24.8***	0.03	-0.11	-27.5%	-22.5***	0.06	0.1286	23.1%	23.02***	0.13
Intermediate ⁽⁵⁾	-0.0125	-29%	-20.2***	0.09	-0.0689	-17.2%	-19.1***	0.12	0.0814	14.6%	19.42***	0.18
Micro firm (0-4 emp.) ⁽⁶⁾	-0.0067	-15.4%	-8.48***	0.23	-0.035	-8.7%	-8.08***	0.18	0.0416	7.5%	8.15***	0.14
Small firm (5-19 emp.) ⁽⁶⁾	-0.0088	-20.4%	-8.58***	0.4	-0.0281	-7%	-7.82***	0.42	0.0369	6.6%	9.26***	0.41
Medium firm (20-99 emp.) ⁽⁶⁾	-0.0023	-5.2%	-2.68***	0.1	-0.0115	-2.9%	-2.63***	0.11	0.0137	2.5%	2.64***	0.11
Hours of work	0.0003	0.8%	4.28***	38.8	0.0003	0.1%	1.33	39.1	-0.0006	-0.1%	-2.58***	38.7
Indefinite contract ⁽⁷⁾	-0.0245	-56.5%	-16.4***	0.64	-0.0461	-11.5%	-12.1***	0.79	0.0705	12.7%	17.56***	0.86
Full-time workers (at least 30h.) ⁽⁸⁾	-0.009	-20.8%	-3.54***	0.89	0.0098	2.5%	1.48	0.92	-0.0008	-0.1%	-0.12	0.9
Other characteristics												
Better skilled	0.0225	51.9%	22.9***	0.64	0.0529	13.2%	18.15***	0.55	-0.0754	-13.6%	-24.6***	0.51
Observed previous experience												
Previous spell(s) as unemployed	0.0088	20.4%	7.63***	0.41	0.0203	5.1%	5.62***	0.29	-0.0291	-5.2%	-7.51***	0.23
Incomes												
Ends meet	-0.0115	-26.6%	-24.6***	2.96	-0.0269	-6.7%	-18.9***	3.31	0.0385	6.9%	25.41***	3.77
Dwelling owner	-0.0047	-11%	-4.26***	0.69	-0.0023	-0.6%	-0.66	0.72	0.0071	1.3%	1.88*	0.74
Monthly work incomes (x 10 ⁻²)	-0.002	-4.6%	-10.1***	869€	-0.0048	-1.2%	-9.7***	955€	0.0068	1.2%	12.2***	1,186€
Business cycle												
Annual unemployment rate	4E-05	0.1%	0.18	10.34	-0.0063	-1.6%	-9.1***	8.89	0.0063	1.1%	8.42***	8.27
Country												
Austria ⁽⁹⁾	-0.0311	-71.9%	-19.5***	0.03	-0.2498	-62.4%	-36.1***	0.05	0.281	50.5%	37.58***	0.13
Belgium ⁽⁹⁾	-0.0002	-0.5%	-0.07	0.04	-0.0559	-14%	-6.45***	0.04	0.0561	10.1%	5.94***	0.05
Denmark ⁽⁹⁾	-0.0188	-43.4%	-8.84***	0.03	-0.1546	-38.6%	-17.5***	0.04	0.1734	31.2%	18.34***	0.07
Finland ⁽⁹⁾	-0.0143	-33.1%	-8.15***	0.05	0.0205	5.1%	2.8***	0.07	-0.0062	-1.1%	-0.79	0.07
France ⁽⁹⁾	-0.0201	-46.4%	-22.1***	0.03	-0.1253	-31.3%	-18.9***	0.03	0.1454	26.1%	19.35***	0.05
Germany ⁽⁹⁾	-0.0065	-14.9%	-4.33***	0.02	-0.0344	-8.6%	-4.05***	0.03	0.0408	7.3%	4.09***	0.03
Greece ⁽⁹⁾	0.0035	8.2%	1.63	0.14	0.1171	29.3%	15.35***	0.1	-0.1207	-21.7%	-14.6***	0.05
Ireland ⁽⁹⁾	-0.0151	-34.9%	-7.73***	0.04	-0.14	-35%	-18.5***	0.04	0.1552	27.9%	18.8***	0.07
Italy ⁽⁹⁾	0.0237	54.8%	10.3***	0.26	0.0451	11.3%	7.31***	0.16	-0.0688	-12.4%	-9.93***	0.12
Luxembourg ⁽⁹⁾	-0.0109	-25.3%	-1.84*	0.003	-0.145	-36.2%	-8.73***	0.004	0.1559	28%	8.83***	0.008
Netherlands ⁽⁹⁾	-0.0187	-43.2%	-8.96***	0.06	-0.161	-40.2%	-19.7***	0.09	0.1797	32.3%	20.2***	0.16
Portugal ⁽⁹⁾	-0.0377	-87.2%	-29.8***	0.07	0.1305	32.6%	13.7***	0.22	-0.0928	-16.7%	-9.38***	0.08
Sweden ⁽⁹⁾	No observations											
United Kingdom ⁽⁹⁾	0.0146	33.6%	2.64***	0.01	-0.0675	-16.9%	-4.54***	0.01	0.0529	9.5%	3.24***	0.01

Reference categories: (1) Non-cohabiting individuals, (2) No education or primary education, (3) Public sector, (4) Construction sector, (5) Non-supervisory, (6) Large firm (> 99 employees), (7) Non-indefinite contract, (8) Not full-time worker (< 30 hours), (9) Spain

Log pseudolikelihood -155211.98

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Table A4. Job satisfaction with type of work for self-employed individuals

Generalized Ordered Logit												
-Job Satisfaction with TYPE OF WORK FOR SELF-EMPLOYED INDIVIDUALS-												
52155												
15952												
...job satisfaction = 1: 4129 (7.9%)												
...job satisfaction = 2: 21574 (41.4%)												
...job satisfaction = 3: 26452 (50.7%)												
Prob (Job Satisfaction = x)	Prob (Job Satisfaction = 1) = 0.0506				Prob (Job Satisfaction = 2) = 0.4367				Prob (Job Satisfaction = 3) = 0.5128			
Variables	dy/dx	(dy/y)/dx x 100	t-stat.	Mean	dy/dx	(dy/y)/dx x 100	t-stat.	Mean	dy/dx	(dy/y)/dx x 100	t-stat.	Mean
Demographic characteristics												
Male	-0.0024	-4.71%	-1.46	0.72	-0.0099	-2.26%	-1.48	0.72	0.0123	2.39%	1.48	0.73
Age	0.0012	2.42%	2.66***	45.11	0.0052	1.18%	2.69***	44.5	-0.0064	-1.24%	-2.69***	43.41
Age (squared)	-1E-05	-0.03%	-2.79***	2156	-6E-05	-0.01%	-2.81***	2104	8E-05	0.01%	2.81***	2001
Cohabiting ⁽¹⁾	0.002	3.93%	1.11	0.81	0.0085	1.94%	1.09	0.82	-0.0105	-2.04%	-1.09	0.81
Number of children under 14	0.0006	1.19%	0.74	0.58	0.0025	0.58%	0.75	0.59	-0.0031	-0.61%	-0.75	0.65
Health												
Disabled	0.0056	11.07%	2.85***	0.12	0.0225	5.14%	2.99***	0.13	-0.0281	-5.47%	-2.97***	0.12
Education												
Secondary education ⁽²⁾	-0.0139	-27.45%	-9.27***	0.20	-0.0621	-14.23%	-9.03***	0.23	0.076	14.83%	9.13***	0.35
University studies ⁽²⁾	-0.0227	-44.87%	-12.8***	0.06	-0.1145	-26.22%	-11.3***	0.1	0.1372	26.75%	11.64***	0.2
Employment characteristics												
Agricultural sector ⁽³⁾	0.0347	68.66%	8.06***	0.47	0.0825	18.9%	7.37***	0.34	-0.1172	-22.86%	-9.14***	0.24
Industrial sector ⁽³⁾	-0.0137	-27.01%	-6.19***	0.07	-0.0649	-14.87%	-5.5***	0.1	0.0786	15.33%	5.63***	0.12
Financial services ⁽³⁾	-0.0174	-34.39%	-7.35***	0.04	-0.0085	-19.81%	-6.29***	0.06	0.1039	20.26%	6.48***	0.11
Wholesale, hotels, restaurants & transport ⁽³⁾	-0.0065	-12.92%	-1.99**	0.27	0.0066	1.5%	0.61	0.34	-2E-05	0%	-0.01	0.29
Other services ⁽³⁾	-0.0087	-17.18%	-1.85*	0.06	-0.1292	-29.59%	-9.17***	0.06	0.1379	26.89%	8.79***	0.13
Own-account worker ⁽⁴⁾	0.0041	8.04%	1.89*	0.61	0.0171	3.92%	1.89*	0.55	-0.0212	-4.13%	-1.9*	0.48
Micro firm (1-4 emp.) ⁽⁴⁾	-1E-06	0%	-0.01	0.33	-0.0176	0%	-0.01	0.35	7E-06	0%	0.01	0.38
Hours of work	4E-05	0.08%	0.5	48.73	-0.0023	-0.54%	-9.76***	48.9	0.0023	0.45%	9.01***	51.34
Full-time workers (at least 30h.) ⁽⁵⁾	-0.0265	-52.48%	-3.97***	0.93	-0.0017	-0.38%	-0.11	0.95	0.0282	5.5%	1.81*	0.95
Other characteristics												
Better skilled	0.0075	14.81%	3.64***	0.40	-0.0043	-0.98%	-0.7	0.4	-0.0032	-0.62%	-0.49	0.44
Observed previous experience												
Previous spell(s) as unemployed	0.0108	21.39%	4.79***	0.16	0.0417	9.55%	5.3***	0.14	-0.0525	-10.24%	-5.2***	0.14
Incomes												
Ends meet	-0.0199	-39.44%	-19.5***	2.59	-0.0415	-9.49%	-13.9***	3.07	0.0614	11.97%	19.49***	3.61
Dwelling owner	0.0041	8.02%	2.42**	0.85	0.0176	4.03%	2.34**	0.84	-0.0216	-4.22%	-2.36**	0.84
Annual S.E. earnings t-1 (x 10 ³)	-0.0003	-0.65%	-5.92***	7.795€	-0.0014	-0.31%	-5.89***	8.994€	0.0017	0.33%	5.91***	13.259€
Business cycle												
Annual unemployment rate	-0.0003	-0.56%	-0.61	10.63	-0.0066	-1.51%	-4.82***	9.66	0.0069	1.34%	4.52***	9.68
Country												
Austria ⁽⁶⁾	-0.0438	-86.61%	-23.9***	0.02	-0.2953	-67.61%	-19.9***	0.02	0.3390	66.12%	20.99***	0.09
Belgium ⁽⁶⁾	-0.0131	-25.85%	-3.42***	0.01	-0.0636	-14.56%	-2.98***	0.01	0.0767	14.95%	3.05***	0.03
Denmark ⁽⁶⁾	-0.0394	-77.87%	-18.2***	0.004	-0.2695	-61.72%	-12.8***	0.01	0.3089	60.24%	13.48***	0.03
Finland ⁽⁶⁾	-0.0287	-56.74%	-8.71***	0.03	-0.0367	-8.40%	-2.39***	0.05	0.0654	12.75%	3.99***	0.07
France ⁽⁶⁾	-0.0337	-66.73%	-15.6***	0.004	-0.2145	-49.13%	-11.8***	0.01	0.2483	48.41%	12.39***	0.03
Germany ⁽⁶⁾	-0.0182	-36%	-4.47***	0.003	-0.0948	-21.7%	-3.67***	0.006	0.113	22.03%	3.78***	0.02
Greece ⁽⁶⁾	0.0302	59.76%	6.38***	0.45	0.2267	51.92%	21.52***	0.28	-0.2569	-50.1%	-20.9***	0.1
Ireland ⁽⁶⁾	-0.041	-81.18%	-23.8***	0.02	-0.2688	-61.57%	-20.1***	0.024	0.3099	60.43%	21.15***	0.09
Italy ⁽⁶⁾	0.0136	26.89%	3.11***	0.21	0.0176	4.03%	1.55	0.19	-0.0312	-6.09%	-2.36**	0.21
Luxembourg ⁽⁶⁾	-0.0330	-65.3%	-7.14***	0.0002	-0.2116	-48.46%	-4.9***	0.002	0.2446	47.71%	5.13***	0.01
Netherlands ⁽⁶⁾	-0.0427	-84.44%	-23.5***	0.002	-0.3053	-69.91%	-19.3***	0.007	0.3480	67.86%	20.29***	0.04
Portugal ⁽⁶⁾	-0.0409	-80.96%	-12.3***	0.09	0.1508	34.53%	8.37***	0.25	-0.1098	-21.42%	-5.76***	0.1
Sweden ⁽⁶⁾	No observations				No observations				No observations			
United Kingdom ⁽⁶⁾	0.0134	26.44%	1.15	0.01	-0.103	-23.60%	-4.23***	0.01	0.0897	17.49%	3.25***	0.02
Reference categories: (1) Non-cohabiting individuals, (2) No education or primary education, (3) Construction sector, (4) Firms with number of employees > 4, (5) Not full-time worker (< 30 hours), (6) Spain												
Log pseudolikelihood												
-40406.605												

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Table A5. Job satisfaction with job security for paid-employed individuals

Generalized Ordered Logit															
-Job Satisfaction with JOB SECURITY FOR PAID-EMPLOYED INDIVIDUALS-															
Number of observations				197285											
Number of individuals				62849											
Number of observations when...				...job satisfaction = 1: 23011 (11.7%)				...job satisfaction = 2: 72174 (36.6%)				...job satisfaction = 3: 102100 (51.7%)			
Prob (Job Satisfaction = x)				Prob (Job Satisfaction = 1) = 0.078				Prob (Job Satisfaction = 2) = 0.4087				Prob (Job Satisfaction = 3) = 0.5132			
Variables				dy/dx (dy/dx) x 100 t-stat. Mean				dy/dx (dy/dx) x 100 t-stat. Mean				dy/dx (dy/dx) x 100 t-stat. Mean			
Demographic characteristics															
Male	0.0028	3.57%	2.52**	0.57	0.0069	1.69%	2.51**	0.60	-0.0097	-1.89%	-2.51**	0.58			
Age	0.0052	6.73%	11.4***	35.99	0.0145	3.56%	13.43***	36.93	-0.0198	-3.86%	-16.4***	38.74			
Age (squared)	-0.0001	-0.08%	-9.92***	1411	-0.0002	-0.04%	-13.1***	1480	0.0002	0.05%	15.59***	1617			
Cohabiting ⁽¹⁾	-0.0047	-6.04%	-3.9***	0.65	-0.0115	-2.8%	-3.96***	0.69	0.0162	3.15%	3.95***	0.75			
Number of children under 14	-0.001	-1.29%	-1.72*	0.6	-0.0025	-0.61%	-1.72*	0.59	0.0035	0.68%	1.72*	0.62			
Health															
Disabled	0.0139	17.84%	6.37***	0.13	0.0017	0.42%	0.39	0.11	-0.0156	-3.05%	-3.18***	0.12			
Education															
Secondary education ⁽²⁾	-0.0001	-0.09%	-0.05	0.34	0.0087	2.12%	2.45**	0.34	-0.0086	-1.67%	-2.13**	0.39			
University studies ⁽²⁾	0.0069	8.81%	4.49***	0.18	0.0165	4.03%	4.64***	0.17	-0.0233	-4.55%	-4.6***	0.24			
Employment characteristics															
Private sector ⁽³⁾	0.0121	15.53%	6.28***	0.81	0.1244	30.43%	27.16***	0.83	-0.1365	-26.6%	-26.9***	0.68			
Agricultural sector ⁽⁴⁾	0.0042	5.44%	1.13	0.06	-0.0717	-17.55%	-6.89***	0.03	0.0675	13.15%	5.67***	0.02			
Industrial sector ⁽⁴⁾	-0.0062	-7.88%	-3.5***	0.26	-0.0156	-3.81%	-3.42***	0.28	0.0217	4.23%	3.44***	0.23			
Financial services ⁽⁴⁾	-0.0185	-23.67%	-10.2***	0.08	-0.0514	-12.57%	-9.16***	0.1	0.0699	13.61%	9.43***	0.11			
Wholesale, hotels, restaurants & transport ⁽⁴⁾	-0.0185	-23.65%	-11.3***	0.22	-0.0494	-12.08%	-10.5***	0.25	0.0678	13.21%	10.73***	0.21			
Other services ⁽⁴⁾	-0.0265	-33.99%	-12.2***	0.26	-0.0975	-23.85%	-16.5***	0.23	0.124	24.16%	17.34***	0.36			
Supervisory ⁽⁵⁾	-0.0234	-30.00%	-16.6***	0.04	-0.0674	-16.49%	-14.4***	0.07	0.0908	17.69%	15.01***	0.13			
Intermediate ⁽⁵⁾	-0.0197	-25.21%	-18.2***	0.1	-0.0543	-13.28%	-16.5***	0.11	0.074	14.41%	17.02***	0.19			
Micro firm (0-4 emp.) ⁽⁶⁾	0.0019	2.46%	1.27	0.23	0.0047	1.15%	1.29	0.19	-0.0066	-1.29%	-1.28	0.12			
Small firm (5-19 emp.) ⁽⁶⁾	-0.0033	-4.2%	-2.2**	0.42	-0.0011	-0.27%	-0.32	0.43	0.0044	0.85%	1.08	0.4			
Medium firm (20-99 emp.) ⁽⁶⁾	-0.0007	-0.93%	-0.48	0.1	-0.0018	-0.44%	-0.48	0.11	0.0025	0.5%	0.48	0.11			
Hours of work	-2E-05	-0.03%	-0.23	38.2	0.0009	0.21%	3.57***	39.47	-0.0008	-0.16%	-3.19***	38.61			
Indefinite contract ⁽⁷⁾	-0.2466	-31.6%	-68.4***	0.44	-0.1237	-30.27%	-32.1***	0.79	0.3703	72.16%	106.8***	0.93			
Full-time workers (at least 30h.) ⁽⁸⁾	-0.0059	-7.52%	-1.94*	0.88	0.0209	5.1%	3.05***	0.93	-0.015	-2.92%	-1.99**	0.91			
Other characteristics															
Better skilled	0.0153	19.66%	11.79***	0.58	0.0024	0.59%	0.81	0.52	-0.0177	-3.46%	-5.54***	0.53			
Observed previous experience															
Previous spell(s) as unemployed	0.0258	33.02%	15.86***	0.44	0.0368	9.01%	10.05***	0.29	-0.0626	-12.19%	-15.6***	0.21			
Incomes															
Ends meet	-0.0178	-22.82%	-28.5***	3.05	-0.0269	-6.59%	-18.7***	3.32	0.0447	8.71%	28.32***	3.8			
Dwelling owner	-0.0036	-4.62%	-2.4**	0.68	0.0114	2.80%	3.23***	0.71	-0.0078	-1.53%	-2.02**	0.74			
Monthly work incomes (x 10 ⁻²)	-0.0015	-1.91%	-7.94***	879€	-0.0041	-1.01%	-9.66***	958€	0.0056	1.09%	10.43***	1204€			
Business cycle															
Annual unemployment rate	0.0037	4.73%	12.01***	10.12	0.0011	0.26%	1.51	8.72	-0.0048	-0.93%	-6.05***	8.26			
Country															
Austria ⁽⁹⁾	0.0159	20.38%	2.93***	0.04	-0.0744	-18.21%	-7.76***	0.05	0.0585	11.4%	5.19***	0.13			
Belgium ⁽⁹⁾	0.0659	84.42%	9.73***	0.04	0.0677	16.57%	7.94***	0.04	-0.1336	-26.03%	-13.9***	0.05			
Denmark ⁽⁹⁾	0.0508	65.14%	7.68***	0.04	-0.0444	-10.86%	-4.47***	0.03	-0.0065	-1.26%	-0.55	0.07			
Finland ⁽⁹⁾	0.0172	22.08%	4.67***	0.06	0.0485	11.88%	7.02***	0.06	-0.0658	-12.81%	-8.24***	0.07			
France ⁽⁹⁾	0.0879	112.62%	19.66***	0.06	0.1204	29.46%	41.3***	0.04	-0.2083	-40.58%	-29.1***	0.03			
Germany ⁽⁹⁾	0.0839	107.50%	14.93***	0.03	0.1165	28.49%	31.42***	0.03	-0.2004	-39.04%	-21.9***	0.02			
Greece ⁽⁹⁾	0.0301	38.57%	8.04***	0.11	0.1561	38.19%	22.73***	0.09	-0.1862	-36.28%	-24.7***	0.06			
Ireland ⁽⁹⁾	0.0221	28.34%	4.73***	0.04	-0.0473	-11.57%	-5.76***	0.04	0.0252	4.91%	2.6***	0.07			
Italy ⁽⁹⁾	0.0739	94.72%	18.25***	0.19	0.1266	30.98%	22.67***	0.16	-0.2006	-39.08%	-31.4***	0.12			
Luxembourg ⁽⁹⁾	0.0957	122.69%	4.92***	0.004	-0.0155	-3.79%	-0.74	0.005	-0.0803	-15.64%	-3.91***	0.018			
Netherlands ⁽⁹⁾	0.0609	77.97%	9.64***	0.08	-0.0023	-0.55%	-0.25	0.08	-0.0586	-11.41%	-5.41***	0.16			
Portugal ⁽⁹⁾	-0.0175	-22.36%	-5.28***	0.09	0.3434	84.03%	48.35***	0.24	-0.326	-63.52%	-42.1***	0.07			
Sweden ⁽⁹⁾	<i>No observations</i>														
United Kingdom ⁽⁹⁾	0.0789	101.10%	6.42***	0.009	0.0666	16.29%	4.05***	0.006	-0.1455	-28.34%	-8.44***	0.005			

Reference categories: (1) Non-cohabiting individuals, (2) No education or primary education, (3) Public sector, (4) Construction sector, (5) Non-supervisory, (6) Large firm (> 99 employees), (7) Non-indefinite contract, (8) Not full-time worker (< 30 hours), (9) Spain

Log pseudolikelihood -160187.79

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Table A6. Job satisfaction with job security for self-employed individuals

Generalized Ordered Logit												
-Job Satisfaction with JOB SECURITY FOR SELF-EMPLOYED INDIVIDUALS-												
52093												
15946												
...job satisfaction = 1: 7754 (14.9%)												
...job satisfaction = 2: 23844 (45.8%)												
...job satisfaction = 3: 20495 (39.3%)												
Number of observations when...	Prob (Job Satisfaction = 1) = 0.123			Prob (Job Satisfaction = 2) = 0.4977			Prob (Job Satisfaction = 3) = 0.3792					
Variables	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean	$\frac{dy}{dx}$	$\frac{(dy/y)}{dx} \times 100$	t-stat.	Mean
Demographic characteristics												
Male	0.0118	9.58%	3.68***	0.73	0.0146	2.93%	3.52***	0.72	-0.0263	-6.95%	-3.59***	0.72
Age	0.0053	4.35%	5.38***	43.88	0.0047	0.95%	3.98***	43.89	-0.0101	-2.66%	-4.69***	44.13
Age (squared)	-5E-05	-0.04%	-4.81***	2042	-6E-05	-0.01%	-4.83***	2050	0.0001	0.03%	4.83***	2067
Cohabiting ⁽¹⁾	-0.0045	-3.69%	-1.17	0.79	-0.0052	-1.05%	-1.2	0.82	0.0098	2.58%	1.19	0.81
Number of children under 14	0.0005	0.41%	0.3	0.61	0.0006	0.12%	0.3	0.62	-0.0011	-0.29%	-0.3	0.63
Health												
Disabled	0.0123	9.98%	3.12***	0.14	0.0134	2.70%	3.39***	0.12	-0.0257	-6.78%	-3.26***	0.12
Education												
Secondary education ⁽²⁾	0.0024	1.93%	0.69	0.29	0.0028	0.56%	0.7	0.26	-0.0051	-1.36%	-0.7	0.33
University studies ⁽²⁾	0.0142	11.52%	2.14**	0.14	-0.0216	-4.34%	-2.46***	0.13	0.0074	1.96%	0.69	0.16
Employment characteristics												
Agricultural sector ⁽³⁾	-0.0414	-33.67%	-9.22***	0.28	-0.056	-11.25%	-8.14***	0.3	0.0974	25.69%	8.63***	0.31
Industrial sector ⁽³⁾	-0.0354	-28.8%	-7.9***	0.1	-0.0531	-10.67%	-6.38***	0.1	0.0885	23.34%	6.94***	0.11
Financial services ⁽³⁾	-0.0196	-15.94%	-3.54***	0.09	-0.0267	-5.35%	-3.1***	0.08	0.0463	12.20%	3.28***	0.09
Wholesale, hotels, restaurants & transport ⁽³⁾	-0.0456	-37.08%	-9.41***	0.28	-0.0233	-4.69%	-2.8***	0.33	0.0690	18.18%	6.33***	0.3
Other services ⁽³⁾	-0.0305	-24.84%	-5.85***	0.11	-0.0446	-8.97%	-4.8***	0.08	0.0752	19.83%	5.19***	0.1
Own-account worker ⁽⁴⁾	0.0194	15.78%	3.11***	0.58	0.0579	11.64%	6.33***	0.54	-0.0774	-20.40%	-7.66***	0.46
Micro firm (0-4 emp.) ⁽⁴⁾	-0.0049	-3.98%	-0.79	0.33	0.0301	6.04%	3.31***	0.36	-0.0252	-6.63%	-2.55***	0.39
Hours of work	-0.0007	-0.6%	-5.11***	47.69	-0.0019	-0.39%	-9.26***	49.22	0.0027	0.71%	11.87***	52.08
Full-time workers (at least 30h.) ⁽⁵⁾	-0.0489	-39.74%	-5.14***	0.92	0.0525	10.54%	3.94***	0.95	-0.0036	-0.94%	-0.26	0.95
Other characteristics												
Better skilled	0.0101	8.20%	4.01***	0.45	0.0118	2.36%	4.05***	0.41	-0.0219	-5.76%	-4.04***	0.42
Observed previous experience												
Previous spell(s) as unemployed	0.036	29.31%	7.54***	0.2	0.0342	6.86%	9.64***	0.14	-0.0702	-18.51%	-8.53***	0.12
Incomes												
Ends meet	-0.0548	-44.56%	-32.1***	2.75	-0.0293	-5.89%	-10.9***	3.18	0.0841	22.18%	29.45***	3.66
Dwelling owner	-0.0217	-17.66%	-4.18***	0.8	0.0004	0.07%	0.05	0.84	0.0214	5.63%	2.5**	0.86
Annual S.E. earnings t-1 (x 10 ³)	-0.0015	-1.22%	-7.95***	8,372€	2E-05	0%	0.08	9,816€	0.0015	0.39%	6.34***	13,539€
Business cycle												
Annual unemployment rate	0.0049	3.97%	5.44***	10.4	-0.0024	-0.49%	-1.77*	9.63	-0.0024	-0.64%	-1.76*	9.64
Country												
Austria ⁽⁶⁾	0.0485	39.42%	2.53***	0.04	-0.2127	-42.73%	-9.45***	0.03	0.1642	43.30%	6.81***	0.10
Belgium ⁽⁶⁾	0.1243	101.06%	5.33***	0.03	-0.0595	-11.96%	-2.7***	0.02	-0.0648	-17.08%	-3.15***	0.03
Denmark ⁽⁶⁾	0.0932	75.8%	3.36***	0.02	-0.2386	-47.94%	-9.07***	0.009	0.1454	38.34%	4.56***	0.03
Finland ⁽⁶⁾	0.0461	37.52%	4.04***	0.06	-0.0206	-4.13%	-1.57	0.05	-0.0256	-6.74%	-1.85*	0.07
France ⁽⁶⁾	0.112	91.04%	5.34***	0.02	-0.0352	-7.06%	-1.7*	0.02	-0.0768	-20.26%	-4.16***	0.02
Germany ⁽⁶⁾	0.1326	107.78%	4.42***	0.011	-0.0472	-9.49%	-1.62	0.009	-0.0853	-22.50%	-3.72***	0.013
Greece ⁽⁶⁾	0.0613	49.83%	6.37***	0.28	0.1348	27.09%	12.28***	0.25	-0.1961	-51.72%	-19.4***	0.12
Ireland ⁽⁶⁾	0.0321	26.12%	2.34**	0.04	-0.0954	-19.17%	-5.75***	0.04	0.0633	16.70%	3.62***	0.08
Italy ⁽⁶⁾	0.0824	66.97%	8.06***	0.24	-0.0332	-6.68%	-2.92***	0.18	-0.0491	-12.96%	-4.35***	0.22
Luxembourg ⁽⁶⁾	0.0653	53.10%	2.13**	0.002	0.0444	8.92%	4.89***	0.003	-0.1097	-28.92%	-2.76***	0.005
Netherlands ⁽⁶⁾	0.0533	43.37%	2.24**	0.014	-0.1187	-23.85%	-4.24***	0.015	0.0654	17.24%	2.35**	0.03
Portugal ⁽⁶⁾	-0.036	-29.25%	-3.72***	0.09	0.2228	44.75%	15.82***	0.23	-0.1868	-49.25%	-13.5***	0.10
Sweden ⁽⁶⁾	No observations				No observations				No observations			
United Kingdom ⁽⁶⁾	0.1676	136.27%	6.09***	0.02	-0.1171	-23.53%	-4.48***	0.01	-0.0505	-13.31%	-2.22**	0.015
Reference categories: (1) Non-cohabiting individuals, (2) No education or primary education, (3) Construction sector, (4) Firms with number of employees > 4, (5) Not full-time worker (< 30 hours), (6) Spain												
Log pseudolikelihood	47655.012											

Notes: ***significativity ≤ 0.01 ** significativity ≤ 0.05 * significativity ≤ 0.1

Appendix B: Description of variables

Variable definitions referring to exercises developed with the European Community Household Panel (ECHP) are reported below.

Dependent variables

Job satisfaction with type of work	Dependent variable varies from 1 to 3 showing a scale of job satisfaction with present job in terms of type of work. Thus, this variable equals 1 for individuals who are not satisfied with their present job and 3 for satisfied individuals.
Job satisfaction with job security	Dependent variable varies from 1 to 3 showing a scale of job satisfaction with present job in terms of job security. Thus, this variable equals 1 for individuals who are not satisfied with their present job and 3 for satisfied individuals.

Explanatory variables

Self-employment:

Self-employed	Dummy equals 1 for self-employed individuals.
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Demographic characteristics:

Male	Dummy equals 1 for males.
Age	Age reported by the individual, ranging from 21 to 59.
Squared age	Squared age, based on age reported by the individual, ranging from 21 to 59.
Cohabiting	Dummy equals 1 for cohabiting individuals and 0 otherwise.
Number of children under 14	Number of children aged under than 14 living within the household.
Disabled	Dummy equals 1 for individuals having any chronic, physical or mental health problem, illness or disability.

Education:

No education/primary education	Dummy equals 1 for illiterate, no schooling individuals, or individuals with primary schooling as highest education level achieved, and 0 otherwise.
Secondary education	Dummy equals 1 for individuals with secondary schooling as highest education level achieved and 0 otherwise.
University studies	Dummy equals 1 for individuals with university studies and 0 otherwise.

Employment characteristics:

Private sector	Dummy equals 1 for individuals working in the private sector (versus the public sector).
Agricultural sector	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business is A (Agriculture, Hunting and Forestry) and B (Fishing), by the "Nomenclature of Economic Activities" (NACE-93).
Construction sector (reference category)	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business is F (construction), by the "Nomenclature of Economic Activities" (NACE-93).
Industrial sector	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business are C (mining and quarrying), D (manufactures) and E (electricity, gas and water supply), by the "Nomenclature of Economic Activities" (NACE-93).

Wholesale, hotels, restaurants, transport	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business are G (wholesale and retail trade; repair of motor vehicles, motorcycles and personal/household goods), H (hotels and restaurants) and I (transport, storage and communication), by the “Nomenclature of Economic Activities” (NACE-93).
Financial services	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business are J (Financial intermediation) and K (real estate, renting and business activities), by the “Nomenclature of Economic Activities” (NACE-93).
Other services	Dummy equals 1 for individuals whose codes of main activity of the local unit of the business are L (public administration and defense; compulsory social security), M (education), N (health and social work) and O-Q (other community, social and personal service activities; private households with employed persons; extra-territorial organizations and bodies), by the “Nomenclature of Economic Activities” (NACE-93).
Own-account worker (0 employees)	Dummy equals 1 for own-account workers individuals (0 employees).
Micro firm (0-4 employees)	Dummy equals 1 for individuals working in very small firms (0-4 employees).
Micro firm (1-4 employees)	Dummy equals 1 for individuals working in very small firms (1-4 employees).
Small firm (5-19 employees)	Dummy equals 1 for individuals working in small firms (5-19 employees).
Medium firm (20-99 employees)	Dummy equals 1 for individuals working in medium firms (20-99 employees).
Large firm (> 99 employees)	Dummy equals 1 for individuals working in large firms (>99 employees).
Supervisory	Dummy equals 1 for individuals whose job status is supervisory.
Intermediate	Dummy equals 1 for individuals whose job status is intermediate.
Non-supervisory (reference category)	Dummy equals 1 for individuals whose job status is non-supervisory.
Hours of work	Hours of work per week.
Indefinite contract	Dummy equals 1 for workers with indefinite contract and 0 otherwise.
Full time job	Dummy equals 1 for full-time workers and 0 otherwise.
Better skills	Dummy equals 1 for individuals who feel having skills or qualifications to do a more demanding job than the one they have.
Observed previous experience:	
Previous spell(s) as unemployed	Dummy equals 1 for individuals with observed previous spell(s) as unemployed.
Incomes:	
Ends meet	Variable varies from 1 to 6 showing a scale of ability to make ends meet. Thus, this variable equals 1 for households with great difficulty to make ends meet, and 6 for households that very easily make ends meet.
Dwelling owner	Dummy equals 1 for households owning the dwelling in period $t-1$, and 0 otherwise.

Monthly work incomes t-1 (x 10 ⁻²)	Work incomes earned during the previous month to the interview, converted to hundreds of average euros of 1996, being corrected by Purchasing Power Parity (across countries) and Harmonised Consumer Price Index (across time).
Annual S.E. earnings t-1 (x 10 ⁻³)	Own-account work incomes earned during period t-1, converted to thousands of average euros of 1996, having been corrected by Harmonised Consumer Price Index. Furthermore, these incomes are corrected by Purchasing Power Parity (across countries).
Annual earnings t-1 (x 10 ⁻³)	Work incomes, either from paid-employment or self-employment, earned during period t-1, converted to thousands of average euros of 1996, having been corrected by Harmonised Consumer Price Index. Furthermore, these incomes are corrected by Purchasing Power Parity (across countries).
Business cycle:	
Annual unemployment rate	Standardized annual unemployment rate (source: OCDE)
Country dummies:	
	<i>Dummies</i> equal 1 for individuals living in the named country, and 0 otherwise. The following countries are included: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom. (Spain is reference category).