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The value of doing what you like: Evidence from the self-employed in 23 countries

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ABSTRACT

The self-employed are substantially more satisfied with their work than employed persons. We document this relationship for 23 countries and show that the higher job satisfaction can mainly be attributed to the more interesting jobs and to the greater autonomy that self-employed persons enjoy. 'Doing what you like to do' seems to provide non-pecuniary benefits from work suggesting the existence of procedural utility: interesting work and autonomy are valued beyond material outcomes as good procedural work characteristics. The results hold for western European, North American and eastern European countries, but largely also for countries with a non-western cultural background.

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1. Introduction

Self-employed people are considerably more satisfied with their work than people employed in organizations. Higher job satisfaction among the self-employed has been consistently found in numerous European countries (see e.g. Blanchflower and Oswald, 1998; Blanchflower, 2000; Benz and Frey, 2008), in the United States (Kawaguchi, 2002; Hundley, 2001) and Canada (Finnie et al., 2003). Also studies looking at revealed behavior have documented benefits of self-employment. For example, self-employed persons are willing to work for a lower wage (Hamilton, 2000), and they accept lower risk-adjusted returns on their entrepreneurial investments (Moskovitz and Vissing-Jorgensen, 2002). Compensating wage and return differentials thus indicate that people forego considerable material gains in order to be self-employed. Why?

This paper seeks an answer to this question, based on an analysis of why the self-employed are happier with their jobs. We begin by documenting job satisfaction differences between self-employed and employed persons for an extended set of 23 countries, finding that in essentially all countries considered, the self-employed are more satisfied with their work. We then examine the reasons behind the job satisfaction differential by attributing it to several important work aspects. The

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results suggest that the more interesting work of self-employed persons and their greater autonomy are largely responsible for their particular job satisfaction. Taken together, these two work characteristics explain between 50 percent (eastern European countries) and 80 percent (western European and North American countries) of the job satisfaction differential between self-employed and employed persons. In contrast, other work aspects such as pay, job security or opportunities for advancement account for relatively little of the observed differences.

According to these findings, interesting work and autonomy are important non-monetary work benefits, at least for self-employed people.¹ Both aspects might be subsumed under the term “doing what one likes”: autonomy is the possibility to choose the work one prefers, and having interesting work means actually being engaged in work one likes. More formally, psychological theories have long been arguing that both autonomy and the possibility to pursue interesting activities should be seen as important elements of a broader human need for “self-determination” (Ryan and Deci, 2000). There is also evidence in our sample that the two aspects are strongly related. Because there is often a high correlation between having an interesting job and having high autonomy among self-employed people, “having an interesting job” emerges as a more robust determinant of higher job satisfaction among the self-employed, while the effect of greater autonomy is sensitive to the specific decomposition procedure used. Thus, the two work aspects might be best understood together as a joint reflection of the higher “self-determination” that self-employed people have, permitting them to enjoy more freedom of choice but also to choose the work tasks they find more interesting.

The analysis in our view provides insights that can inform economic science in a more general sense. First, direct evidence is provided that people value having an interesting job and having autonomy.² In labor economics and organizational economics, these aspects have largely been disregarded as important non-monetary work benefits (e.g. Aghion and Tirole, 1997; Baker et al., 1999; Gibbs and Levenson, 2002). Second, the results point to the existence of “procedural utility” (Frey et al., 2004; Benz, 2008), meaning that people do not value only outcomes, as usually assumed in economics, but also the processes and conditions leading to outcomes. The results presented suggest that having an interesting job and autonomy are not valued because they lead to better material outcomes, like higher income or lower working hours; rather, they provide utility because they constitute good procedural aspects of work. Third, by studying not only countries from western Europe and North America, but also from eastern Europe and from non-Western cultures, we are able to test whether self-determination is valued differently in different cultures. In social sciences outside economics, it is often argued that self-determination may be important to people in “individualistic” Western cultures, such as the United States, but not in more “collectivistic” non-Western cultural contexts, such as Asia (Iyengar and Lepper, 1999; Schwartz, 2000; Markus and Kitayama, 1991). Our results do not support this view. We find that self-employed persons derive greater satisfaction from their work also in non-Western countries, such as Japan. To a considerable extent, this difference can be attributed to the more interesting jobs and to the greater autonomy that self-employed persons enjoy in these countries.

The paper is organized as follows: Section 2 presents the data and methodology used, Section 3 contains the empirical analysis, and Section 4 offers a discussion of the results and their implications. Section 4 also addresses the question of why not more people become self-employed, given that self-employment offers substantial non-monetary benefits. Section 5 concludes the paper.

2. Data and methodology

2.1. Data

The empirical analysis is based on the International Social Survey Program 1997 (ISSP97) module on “Work Orientations”. Although this survey is less comprehensive than established panels, such as the National Longitudinal Survey of Youth, the British Household Panel Survey or the German Socio-Economic Panel, it is nevertheless well suited for the purposes of this paper. First, it includes a much broader set of countries than has been investigated in previous studies (e.g. Blanchflower, 2000), combining data from different geographical and cultural regions, such as western Europe (Germany, Great Britain, France, Italy, Portugal, Switzerland, Denmark, Norway, Sweden), North America (United States of America, Canada), eastern Europe (Hungary, Czech Republic, Poland, Bulgaria, Slovenia, Russia) and a residual group of “non-Western” countries (Japan, New Zealand, Cyprus, Israeli Jews and Arabs, and the less developed countries Bangladesh and the Philippines). Second, the ISSP97 contains information on all the basic variables required for the empirical analysis; the individuals surveyed were asked several identical questions on their work life, which makes meaningful comparisons of the results possible across the countries under consideration.

The original ISSP97 survey contains information on roughly 35,000 individuals living in 25 countries. We construct our sample by including all individuals that are either employed or self-employed in the ISSP97 and that report information on

¹ Several studies on self-employment refer to the notion that greater freedom in the work environment, such as the opportunity to “be your own boss”, is an important source of happiness at work. For example, Hamilton (2000: 628) writes, “For most entrepreneurs, the empirical evidence . . . is consistent with the notion that self-employment offers significant nonpecuniary benefits, such as ‘being your own boss’.” Moskowitz and Vissing-Jorgensen (2002: 772f.) also regard the value of autonomy as a potential explanation of their findings.

² To our knowledge, there are two previous studies showing that the higher job satisfaction of self-employed persons is strongly related to different work content and greater autonomy. However, these studies only present evidence for a limited number of countries; see Hundley (2001) for the United States and Benz and Frey (2008) for Great Britain. Nguyen et al. (2003) report that autonomy positively affects job satisfaction in a sample of US employees.

job satisfaction as well as on some basic control variables (gender, age, years of education). This reduces the sample size to roughly 16,000 observations from 23 countries. Spain and the Netherlands have to be dropped from the analysis because information on self-employment status is missing; moreover, Germany and Israel are counted as one country each (the original ISSP97 survey reports information on western/eastern Germany and Israeli Jews/Arabs separately).

Self-reported job satisfaction is used as the dependent variable in the empirical analysis. It is assessed with the following question: “How satisfied are you in your (main) job?” Individuals are asked to state their job satisfaction on a scale from 1 (“completely satisfied”) to 7 (“completely dissatisfied”); for convenience, answers are recoded so that a value of 7 reflects the highest job satisfaction category and a value of 1 the lowest. The main explanatory variable consists of information on individuals’ self-employment status. The dummy ‘self-employed’ takes on the value 1 when individuals state that they are self-employed and 0 for those employed by an organization (“In your (main) job, are you an employee or self-employed?”). The ISSP97 moreover contains information on some important control variables: personal work income (assessed as income categories or as absolute values, depending on the country), the average number of hours worked per week (including overtime), education (measured in years of schooling), and the age and gender of individuals. Data on occupation and industry is not available for the empirical analysis, as this information is missing for a substantial number of countries.

A potential drawback of the ISSP97 is that it contains only a limited number of control variables and that people are surveyed only once. These shortcomings, however, are compensated by a set of unique survey questions that can be used to perform a direct empirical test of the reasons behind the self-employment–job satisfaction relationship. Both self-employed and employed individuals are asked to rate several important dimensions of their work: “For each of the following statements about your main job, how much do you agree or disagree that it applies to your job?”: (i) “my job is secure”, (ii) “my income is high”, (iii) “my opportunities for advancement are high”, (iv) “my job is interesting”, (v) “I can work independently”, (vi) “in my job I can help other people” and (vii) “my job is useful to society”. Individuals give an evaluation for each of these seven work aspects on a scale from 1 (“strongly disagree”) to 5 (“strongly agree”). The respective answers are used to investigate the reasons for the higher job satisfaction among the self-employed.

2.2. Econometric method

The main goal of the empirical analysis is to determine how much a particular work aspect contributes to the difference in job satisfaction between self-employed and employed people. In order to address this question, an adapted version of the Blinder–Oaxaca decomposition procedure is used (Oaxaca, 1973; Blinder, 1973). The difference in job satisfaction between self-employed and employed persons can be expressed as

$$JS_{\text{Diff}} = \beta_k [\bar{X}_{kS} - \bar{X}_{kE}] \quad (1)$$

where $[\bar{X}_{kS} - \bar{X}_{kE}]$ is the difference in the mean values of the k th determinant between self-employed and employed people, and β_k is the coefficient on the k th determinant. Translated into percentage terms, the contribution of the k th determinant to the difference in job satisfaction between self-employed and employed people can be written as

$$\beta_k \left[\frac{(\bar{X}_{kS} - \bar{X}_{kE})}{(JS_{\text{Diff}})} \right] \times 100. \quad (2)$$

The crucial question from an econometric point of view is how β_k can be estimated in an unbiased way. Following the Blinder–Oaxaca decomposition procedure, we partition the data into the two groups of employed and self-employed people and estimate

$$JS_E = \beta_0 + \beta_{kE} W_{kE} + \gamma_E Z_E + \varepsilon \quad (3)$$

and

$$JS_S = \beta_0 + \beta_{kS} W_{kS} + \gamma_S Z_S + \varepsilon \quad (4)$$

where W_{kE} and W_{kS} denote vectors of the seven work dimensions included in the ISSP97, and Z_E and Z_S are vectors of control variables for employed and self-employed people, respectively. Eqs. (3) and (4) contain the main idea of the Blinder–Oaxaca decomposition: the contribution of the k th work dimension to job satisfaction is estimated separately for the two groups of employed and self-employed people. The estimates of β_k are then used to evaluate how much the job satisfaction of one group would change if it had the work characteristics W_k of the other group. For example, it can be calculated how the job satisfaction of employed persons would be affected if they had the same level of autonomy as self-employed people, *ceteris paribus*.

One can in principle base the decomposition results, as expressed in Eq. (2), on either β_{kE} or β_{kS} (i.e. the contribution of differences in the k th work aspect to the job satisfaction difference can be ‘weighted’ by either the sensitivity of employees’ job satisfaction to the k th work aspect or by the sensitivity of self-employed persons’ job satisfaction to the k th work aspect). We present the results for both methods, but the main results will be based on β_{kE} (i.e. it is reported how much of the job satisfaction difference between self-employed and employed people would disappear if employees had the same work characteristics W_k as the self-employed, given their own evaluation of the particular work characteristics β_{kE} in terms of job satisfaction).

3. Empirical analysis

The empirical analysis is conducted in two parts. First, job satisfaction regressions are estimated for each country in order to investigate whether the self-employed are more satisfied with their jobs than employees, holding basic socio-demographic characteristics constant. In a second step, the reasons behind the self-employment–job satisfaction relationship are analyzed using the Blinder–Oaxaca decomposition procedure outlined above.

3.1. Basic results

Table 1 presents the basic results on the relationship between self-employment and job satisfaction in the 23 countries considered. In the two left-hand columns of the table, descriptive statistics are reported for each country, indicating the differences in average job satisfaction between self-employed and employed people. In the two right-hand columns, the effects of self-employment on job satisfaction are evaluated in multivariate ordered-logit regressions. Besides the dummy variable “self-employed”, for which the estimated coefficient is reported in Table 1, a first specification also includes control variables on work income, weekly hours worked, weekly hours worked squared, education, education squared, age, age

Table 1
Self-employment and job satisfaction in 23 countries (dependent variable: job satisfaction)

Region/country	Job satisfaction (means)		Coefficient on the variable “self-employed” (ordered-logit regressions)	
	Self-employed	Employed	Regression including “compensating” variables (I)	Regression excluding “compensating” variables (II)
Western Europe				
Germany	5.52** (N=93)	5.12 (N=892)	0.746** (N=888)	0.701** (N=911)
Great Britain	5.40* (N=82)	5.08 (N=485)	0.514° (N=504)	0.579* (N=560)
France	5.50* (N=34)	5.06 (N=653)	0.957** (N=656)	0.796* (N=687)
Italy	5.45** (N=142)	5.06 (N=321)	0.895** (N=289)	0.700** (N=460)
Portugal	5.24 (N=226)	5.14 (N=662)	0.267 (N=846)	0.122 (N=853)
Switzerland	5.87** (N=228)	5.43 (N=1505)	0.682** (N=1442)	0.773** (N=1725)
Denmark	5.84 (N=45)	5.68 (N=593)	0.584 (N=581)	0.349 (N=635)
Norway	5.43** (N=157)	5.20 (N=1456)	0.374* (N=1304)	0.335* (N=1395)
Sweden	5.70** (N=86)	5.20 (N=728)	1.049** (N=728)	0.968** (N=768)
North America				
USA	5.63** (N=112)	5.32 (N=714)	0.405° (N=713)	0.414* (N=822)
Canada	5.44** (N=98)	5.06 (N=528)	0.500* (N=470)	0.512* (N=516)
Eastern Europe				
Hungary	5.05* (N=93)	4.77 (N=525)	0.041 (N=510)	0.462* (N=618)
Czech Republic	5.63** (N=54)	5.06 (N=467)	1.026° (N=360)	0.889** (N=516)
Poland	5.20 (N=149)	5.08 (N=392)	0.267 (N=479)	0.296 (N=517)
Bulgaria	5.53** (N=53)	4.96 (N=405)	0.873** (N=400)	0.978** (N=448)
Slovenia	5.08 (N=49)	4.95 (N=458)	0.116 (N=395)	0.235 (N=486)
Russia	4.95 (N=86)	4.84 (N=773)	0.306 (N=671)	0.216 (N=817)
Other “non-Western” countries				
Japan	5.17** (N=195)	4.74 (N=517)	0.391° (N=559)	0.382* (N=679)
New Zealand	5.32 (N=66)	5.44 (N=236)	−0.173 (N=276)	−0.107 (N=283)
Cyprus	6.08** (N=153)	5.50 (N=423)	1.225** (N=557)	1.182** (N=564)
Israel (Jews)	5.91** (N=93)	5.24 (N=364)	0.602* (N=383)	1.004** (N=454)
Israel (Arabs)	5.72 (N=46)	5.36 (N=134)	1.091* (N=158)	0.951** (N=174)
Bangladesh	5.43 (N=53)	5.17 (N=421)	0.799* (N=463)	0.897** (N=474)
The Philippines	5.71° (N=307)	5.51 (N=300)	0.142 (N=482)	0.306° (N=595)
Control variables				
Personal income			Yes	No
Working hours			Yes	No
(Working hours) ²			Yes	No
Education			Yes	Yes
(Education) ²			Yes	Yes
Age			Yes	Yes
(Age) ²			Yes	Yes
Gender			Yes	Yes

Data source: ISSP97, Module on “Work Orientations”.

Notes: Numbers in the two left-hand columns are unweighted sample means; the two right-hand columns contain estimated coefficients on the variable “self-employed” from unweighted ordered-logit regressions. The regressions “including compensating variables” are estimated including variables on personal work income (dummy variables for income categories or log(income), depending on the country), on average weekly hours worked and on hours worked squared. In the regressions “excluding compensating variables”, these three variables are dropped from the analysis. This results in considerably larger sample sizes, as information on income is missing, particularly for many self-employed persons. Significance levels: *0.01 < p < 0.05, **p < 0.01, °0.1 < p < 0.05.

squared and gender (“regression including compensating variables”). In a second specification, the same regressions are run without the variables on income and working hours (“regression excluding compensating variables”).³ The reason for using two specifications is that information on work income is missing for many individuals in the ISSP97, particularly for self-employed people. The sample sizes for the second specification can thus be substantially higher, which allows us to assess the robustness of the estimated results. Moreover, the variables on income and working hours are likely to be endogenous in the context of self-employment. As a consequence, the second specification avoids potential endogeneity bias in the estimation of the self-employment–job satisfaction relationship.

The results in Table 1 show that self-employed people enjoy higher job satisfaction than employees in essentially all of the 23 countries covered by the ISSP97. The raw differences indicate a positive relationship between self-employment and job satisfaction for every country except for New Zealand, where the self-employed are slightly less happy with their jobs than employed persons (although not statistically significantly so). The findings are confirmed in the regression analysis. Particularly for western European and North American countries, positive and sizeable coefficients on the variable “self-employed” are found. Also in eastern European and non-Western countries, self-employment in general is associated with higher job satisfaction, but the estimated coefficients do not reach statistical significance in every case (the number of self-employed persons in the samples is often quite small). As factors such as income or working hours are held constant in the first regression specification, it can be ruled out that differences in the material situation of self-employed and employed persons are responsible for the differences in job satisfaction. In general, the results confirm and, at the same time, extend the findings previously reported in the literature for European and North American countries (e.g. Blanchflower, 2000; Benz and Frey, 2008).

3.2. Causes of higher job satisfaction among the self-employed

In the next step of the empirical analysis, potential explanations for the observed self-employment–job satisfaction relationship are examined. For that purpose, the variables on different work aspects described in the data section are used. As the ISSP97 includes seven such work aspects, a separate analysis for every country would lead to a large set of results. The analysis is therefore conducted for groups of countries: western European countries, North American countries, and eastern European nations are pooled together, whereas “non-Western” countries continue to be analyzed separately because this residual category appears as too heterogeneous to form a single group.

Table 2 presents a first set of results from Blinder–Oaxaca decompositions, showing how much of the job satisfaction difference between self-employed and employed people can be explained by differences in a particular work aspect (in percentage terms). The estimates reported in Table 2 are based on β_{KE} (as defined in Eq. (3) above), that is, the contribution of a particular work aspect is assessed based on employees’ evaluation of the respective work aspect in terms of job satisfaction. Later, the sensitivity of the results is discussed when the evaluation of self-employed persons is used (Table 3).

In the first column of Table 2, the partial correlation between self-employment and job satisfaction is reported for each group of countries, estimated by an ordered-logit regression, including a set of control variables (as in specification two above) and country-fixed effects where appropriate. In accordance with the findings on single countries, a positive relationship between self-employment and job satisfaction is estimated for every geographical and cultural region (except, again, for New Zealand). In the second column, the results are replicated using an OLS rather than an ordered-logit estimator. Linear regression results are reported because the Blinder–Oaxaca decomposition procedure can only be meaningfully applied if cardinality of the data is assumed.⁴ As a consequence, the decomposition analysis is based on the OLS coefficients reported in the second column.

Table 2 shows that the higher job satisfaction among self-employed people can be explained mainly by two job aspects: their more interesting work and their higher autonomy. In the group of western European countries (which contains 9 nations), work perceived as more interesting accounts for 57.9 percent of the difference in job satisfaction between self-employed and employed people, and differences in autonomy account for 34.9 percent. In contrast, other work aspects such as job security, income or opportunities for advancement explain relatively little of the observed job satisfaction difference (–2.5, –1.3 and 1.8 percent, respectively). Overall, over 90 percent of the higher job satisfaction of the self-employed can be attributed to more interesting work and greater autonomy. The findings are similar for North American and eastern European countries. In the United States and Canada, the self-employed are found to be happier with their jobs mainly because of their more interesting work (60.9 percent) and their higher autonomy (19 percent), but better opportunities for advancement also seem to play a role (16.3 percent). In eastern Europe, autonomy and more interesting work account for roughly 50 percent of the job satisfaction difference (17.4 percent and 31.7 percent, respectively), but in these transition economies, income perceived as high turns out to be the most important determinant of higher job satisfaction among the self-employed (36.6 percent).⁵

³ The estimation results for the control variables are not shown in Table 1 for reasons of space, but they can be obtained from the authors.

⁴ The question of whether proxy measures for utility (such as job satisfaction or life satisfaction data) should be treated ordinally or cardinally has been shown to be much less of a problem in practice than in theory, see for example Ferrer-i-Carbonell and Frijters (2004).

⁵ An alternative explanation for the higher job satisfaction among the self-employed not covered by the different work aspects analyzed here is that it mainly stems from a firm size effect. Casual observation suggests that self-employed persons work in small firms, while the average employee works in

Table 2
The causes of higher job satisfaction among the self-employed: basic results

Region/country	Percentage of the job satisfaction difference between self-employed and employed persons explained by the difference in the respective job dimension ^a								
	Difference in job satisfaction ^b		Autonomy	“Work is interesting”	Job security	High income	Advancement opportunities	Possibility to help others	Usefulness for society
	Ordered-logit regression	OLS regression							
Western Europe (N = 7994)	0.539** (0.109)	0.294** (0.055)	34.9	57.9	−2.5	−1.3	1.8	0.0	1.0
North America (N = 1338)	0.467** (0.142)	0.335** (0.079)	19.0	60.9	−1.32	8.9	16.3	0.7	1.3
Eastern Europe (N = 3402)	0.411** (0.119)	0.261** (0.066)	17.4	31.7	0.7	36.6	8.6	0.7	0.7
Japan (N = 679)	0.382* (0.176)	0.233* (0.111)	8.6	77.0	−1.6	2.7	−0.8	−29.2	4.6
New Zealand (N = 283)	−0.107 (0.266)	−0.132 (0.146)	1.3	−1.0	−23.9	−0.1	21.0	−0.8	2.6
Israel (Jews) (N = 454)	1.004** (0.219)	0.664** (0.155)	9.2	21.1	0.3	11.4	4.7	0.9	0.2
Israel (Arabs) (N = 174)	0.951** (0.344)	0.644* (0.265)	20.6	9.2	−0.2	10.6	−0.3	−26.7	7.1
Cyprus (N = 564)	1.182** (0.190)	0.572** (0.092)	0.2	17.1	2.0	15.1	−1.9	2.0	−0.1
Less developed countries (N = 1069)	0.315* (0.138)	0.245* (0.100)	33.4	40.3	12.0	−6.8	4.9	14.9	5.3

Data source: ISSP97, Module on “Work Orientations”.

^a Percentage explained = $\beta_{kS}[(\bar{W}_{kS} - \bar{W}_{kE})/(S_{\text{coeff}})] \times 100$, where β_{kE} is the coefficient on work dimension k for the sample of employed persons; \bar{W}_{kS} and \bar{W}_{kE} are the average values for work dimension k for self-employed and employed persons, respectively, and S_{coeff} is the coefficient on the variable “self-employed” from an OLS regression. Signs are reversed for the case of New Zealand, in order to show whether a work aspect affects the job satisfaction of the self-employed positively or negatively.

^b Coefficients on the variable “self-employed” from unweighted ordered-logit and OLS regressions. In parentheses are standard errors (robust in the case of western Europe, North America, eastern Europe and the less developed countries). In addition to the self-employment variable reported, the regressions include variables on education, education squared, age, age squared, gender- and country-fixed effects where appropriate. Significance levels: * $0.01 < p < 0.05$, ** $p < 0.01$.

Table 3

The causes of higher job satisfaction among the self-employed: detailed results

Region/country	Percentage of the job satisfaction difference between self-employed and employed persons explained by the difference in the respective job dimension ^a													
	Autonomy		"Work is interesting"		Job security		High income		Advancement opportunities		Possibility to help others		Usefulness for society	
	I ^b	II ^b	I	II	I	II	I	II	I	II	I	II	I	II
Western Europe (N = 7994)														
Difference in work aspect	0.761		0.349		-0.102		-0.035		0.062		0.271		0.306	
Percent explained, coeff. EMP	34.9		57.9		-2.5		-1.3		1.8		0.0		1.0	
Percent explained, coeff. SE	21.5	73.3	62.0	-	-3.0	-3.6	-1.5	-1.6	0.8	1.8	6.4	10.1	-8.9	-4.1
North America (N = 1338)														
Difference in work aspect	0.669		0.389		-0.046		0.256		0.314		0.106		0.137	
Percent explained, coeff. EMP	19.0		60.9		-1.32		8.9		16.3		0.7		1.3	
Percent explained, coeff. SE	-1.2	35.4	58.6	-	-2.8	-3.2	8.0	9.9	9.3	12.4	5.6	8.9	-8.1	-5.1
Eastern Europe (N = 3402)														
Difference in work aspect	0.813		0.224		0.032		0.440		0.205		0.089		0.021	
Percent explained, coeff. EMP	17.4		31.7		0.7		36.6		8.6		0.7		0.7	
Percent explained, coeff. SE	-27.4	1.9	29.9	-	42.0	46.0	4.2	7.6	1.6	1.6	0.3	1.7	-0.2	0.3
Japan (N = 679)														
Difference in work aspect	0.955		0.372		0.231		0.043		-0.014		0.345		0.103	
Percent explained, coeff. EMP	8.6		77.0		-1.6		2.7		-0.8		-29.2		4.6	
Percent explained, coeff. SE	-40.2	-10.3	70.6	-	11.0	13.3	3.3	3.5	-0.4	-0.5	-20.4	-10.4	5.7	6.3
New Zealand (N = 283)														
Difference in work aspect	0.059		-0.002		-0.202		0.104		0.160		-0.016		-0.124	
Percent explained, coeff. EMP	1.3		-1.0		-23.9		-0.1		21.0		-0.8		2.6	
Percent explained, coeff. SE	16.5	18.8	-0.6	-	-38.5	-35.6	9.3	6.8	43.4	47.2	-1.3	-0.9	-19.2	-31.2
Israel (Jews) (N = 454)														
Difference in work aspect	0.823		0.326		0.052		0.446		0.265		0.063		0.019	
Percent explained, coeff. EMP	9.2		21.1		0.3		11.4		4.7		0.9		0.2	
Percent explained, coeff. SE	19.1	31.2	14.1	-	2.5	2.1	7.9	7.1	6.4	11.9	2.5	2.8	-0.5	-0.2
Israel (Arabs) (N = 174)														
Difference in work aspect	1.122		0.092		0.225		0.338		0.013		0.370		0.123	
Percent explained, coeff. EMP	20.6		9.2		-0.2		10.6		-0.3		-26.7		7.1	
Percent explained, coeff. SE	-13.9	32.1	10.2	-	-9.2	-14.4	12.7	5.7	-0.2	-0.8	5.3	22.6	-21.5	-25.4
Cyprus (N = 564)														
Difference in work aspect	1.234		0.273		0.210		0.462		-0.208		0.166		0.039	
Percent explained, coeff. EMP	0.2		17.1		2.0		15.1		-1.9		2.0		-0.1	
Percent explained, coeff. SE	19.2	26.8	9.1	-	-1.9	-2.6	29.9	29.4	-0.1	-1.5	6.2	4.9	-1.5	0.4
Less developed countries (N = 1069)														
Difference in work aspect	0.593		0.325		0.093		0.425		0.389		0.274		-0.133	
Percent explained, coeff. EMP	33.4		40.3		12.0		-6.8		4.9		14.9		5.3	
Percent explained, coeff. SE	-20.3	-1.9	33.6	-	3.1	3.6	13.7	14.1	31.3	37.8	10.6	16.1	-2.7	-3.3

Data source: ISSP97, Module on "Work Orientations".

^a Percentage explained = $\beta_{kS}[(\bar{W}_{kS} - \bar{W}_{kE}) / (S_{\text{coeff}})] \times 100$, where β_{kS} is the coefficient on work dimension k for the sample of employed persons ("coeff. EMP") or the sample of self-employed persons ("coeff. SE"), $\bar{W}_{kS} - \bar{W}_{kE}$ is the difference in work dimension k between self-employed and employed persons, and S_{coeff} is the coefficient on the variable "self-employed" from an OLS regression (as in Table 2). Signs are reversed for the case of New Zealand, in order to show whether a work aspect affects the job satisfaction of the self-employed positively or negatively.

^b In model I, separate job satisfaction regressions are estimated for self-employed and employed persons, including all work dimensions as explanatory variables. In model II, the variable on "work is interesting" is excluded from the regressions. This is done in order to evaluate how much the effect of the variable "autonomy" is affected by its strong collinearity with the variable "interesting work" for self-employed people.

The picture is more mixed for the residual group of “non-Western” countries. Here, it is not possible to relate the self-employment–job satisfaction effect in any consistent way to one of the work dimensions considered. Autonomy seems to be of some importance for the higher job satisfaction of the self-employed in these countries, explaining between 0.2 percent (Cyprus) and 33.4 percent (less developed countries) of the job satisfaction difference. More relevant is interesting work, accounting for between 9.2 percent (Israeli Arabs) and 77.0 percent (Japan). In contrast, other work aspects play a less important role, the only factor having some consistent explanatory power being higher income (between 10 percent and 15 percent in Israel and Cyprus). Still, some results are noteworthy. For example, the higher job satisfaction of self-employed persons in Japan can be almost fully explained by their more interesting work (77 percent) and to some extent by their higher autonomy (8.6 percent). In a similar vein, more interesting work and greater autonomy explain over 70 percent of the higher job satisfaction among self-employed people in the less developed countries Bangladesh and the Philippines (40.3 and 33.4 percent, respectively).

3.3. Sensitivity analysis

In Table 3, the sensitivity of the decomposition results is assessed. In addition to the findings based on β_{KE} , as reported in Table 2, detailed results are presented for decompositions based on β_{KS} (i.e. using self-employed persons' evaluation of a particular work aspect in terms of job satisfaction rather than employees' evaluation).

Table 3 indicates three patterns. First, the contribution of most work aspects to the job satisfaction difference between self-employed and employed persons is stable across β_{KE} and β_{KS} . This can be seen from comparing the rows “percent explained, coeff. EMP” and “percent explained, coeff. SE (model I)” in Table 3. For example, in western European countries, the work dimensions of job security, income, opportunities for advancement, possibilities to help others and usefulness for society make similar contributions to the self-employment–job satisfaction relationship irrespective of whether they are assessed based on self-employed or employed persons' evaluation of the respective work aspect in terms of job satisfaction. With some exceptions (in particular for eastern Europe), the same holds true for the other regions/countries considered. Second, having interesting work is a robust determinant of the higher job satisfaction among self-employed persons. The respective decomposition estimates are largely insensitive to using β_{KE} or β_{KS} . And third, the effect of autonomy is sensitive to the specific decomposition procedure used. The findings reported in the row “percent explained, coeff. SE (model I)” indicate that, ceteris paribus, autonomy in some cases contributes to the job satisfaction difference between self-employed and employed people (e.g. by 21.5 percent in western Europe), but in other cases, it makes no contribution or even a negative one (e.g. by –27.4 percent in eastern Europe). In general, the decomposition estimates for autonomy are smaller if they are based on β_{KS} rather than on β_{KE} , indicating that having autonomy contributes less to the job satisfaction of the self-employed than to the job satisfaction of employed persons and that in some regions, it even lowers the job satisfaction of the self-employed.

On the one hand, these findings are good news for the empirical analysis because they show that self-selection is unlikely to bias the empirical results. It could be argued, for example, that persons with strong preferences for having an interesting job or for autonomy are more likely to choose self-employment, which would lead to an overestimation of the beneficial effects that more interesting work and more autonomy would have for employees. In general, the similar estimates for β_{KS} and β_{KE} suggest that the preferences of self-employed and employed people for particular work characteristics are quite comparable. On the other hand, some self-selection should arguably occur if autonomy and interesting work are really important characteristics of self-employment. This is in particular the case as the self-employed actually report much higher levels of work independence in all regions considered (except for New Zealand). The mean differences indicated in Table 3 show that the self-employed state between 0.593 points (less developed countries) and 1.234 points (Cyprus) more autonomy at work than employees (on a scale from 1 to 5). These much higher levels of autonomy might partly explain why the estimates on the variable autonomy are different for the sample of self-employed persons: the smaller coefficients could reflect that there is a diminishing marginal contribution of autonomy to job satisfaction.

In order to investigate the sensitivity of the findings on autonomy further, Table 3 reports results from an additional decomposition analysis based on β_{KS} . In contrast to model I, which includes all work aspects in the job satisfaction regression for self-employed persons, model II excludes the work dimension “having an interesting job” from the regression. The findings show that this greatly affects the decomposition estimates for the work dimension autonomy, but not for other work aspects. For example, the contribution of autonomy to differential job satisfaction in western Europe rises from 21.5 to 73.3 percent, in North America from –1.2 to 35.4 percent, and in eastern Europe from –27.4 to 1.9 percent. On the one hand, this suggests that autonomy and having interesting work are highly correlated for self-employed people and that this high correlation masks

a much larger organization. If job satisfaction is negatively related to firm size, then this may fully explain the job satisfaction differences between self-employed and employed persons. In fact, Idson (1990) and Benz and Frey (2008) empirically document a negative relationship between firm size and job satisfaction. Both papers also suggest that the reasons behind this relationship are similar to those that make the self-employed more satisfied with their jobs: the low job satisfaction among employees in large firms can be explained mainly by less rewarding work content and less autonomy. Nevertheless, Benz and Frey also show that self-employed persons are significantly more satisfied with their jobs than employees working in small firms (with less than 10 to 20 employees). In the ISSP97, comprehensive data on firm size is only available for Norway. Here, employees working in small firms (<10 employees, $N=458$) report an average job satisfaction of 5.29, while people working in larger firms (>10 employees, $N=951$) report an average job satisfaction of 5.17. Both values are lower than the job satisfaction of the self-employed in Norway (5.43, $N=157$), with respective p values of 0.13 and 0.002.

much of the effect that autonomy has for the job satisfaction of the self-employed. On the other hand, the contribution of autonomy remains low even if interesting work is not accounted for in three instances, namely in eastern European countries, Japan, and less developed countries.

Overall, the empirical results indicate that having an interesting job is a robust and important determinant of higher job satisfaction among the self-employed, while higher autonomy is a less sizeable and stable contributor. The two work aspects might be best understood as a joint reflection of the higher “self-determination” that self-employed people have. Self-determination permits the self-employed to enjoy more freedom of choice, but it also allows them to choose the work tasks they find more interesting. Empirically, having interesting work seems to be the more important aspect of self-determination than autonomy per se.

4. Discussion

4.1. *The value of doing what one likes*

The results reported in the empirical section shed light on the well-documented fact that self-employment is associated with particular benefits. Previous influential work has shown that the self-employed are, for example, prepared to work for lower wages in order to be self-employed (Hamilton, 2000), or that they accept lower risk-adjusted returns on the entrepreneurial investments they make in their own firms (Moskovitz and Vissing-Jorgensen, 2002). Here, it is investigated in detail what might be the non-pecuniary benefits of self-employment (see also Hundley, 2001 for a similar analysis covering the US). Given that job satisfaction is a useful approximation for the utility from work, the findings indicate that the self-employed enjoy considerable utility from having more interesting work than employed persons and from the opportunity of being their own boss. The value of “doing what one likes” explains a large part of the job satisfaction differential between self-employed and employed people, at least in Western countries.

To our knowledge, the importance of “doing what one likes” has hardly been recognized in the theoretical economic literature thus far. Autonomous decision-making, for example, is analyzed in studies in organizational economics (Williamson, 1975, 1985; Aghion and Tirole, 1997; Baker et al., 1999), but it has not been taken into account that people might have a preference for autonomy per se. In a similar vein, the value of having an interesting job is rarely included in theoretical or empirical economic analyses (for a discussion, see Gibbs and Levenson, 2002). Taking the non-pecuniary benefits of doing what one likes seriously, however, can enrich economic analysis in the fields of organization and employment.

4.2. *The existence of procedural utility*

In a broader context, the findings reported here can be interpreted as evidence for “procedural utility”, which means that people care not only about instrumental outcomes, as is usually assumed in economics, but also value the processes and conditions leading to outcomes. It has been shown that procedural utility is an empirically relevant phenomenon in many areas of the economy, polity and society (Frey et al., 2004; Benz, 2008). Self-employment is related to the concept because it reflects the difference between two fundamental decision-making procedures of the economy: whereas the self-employed are their own bosses and act as independent contractors on the market, employed persons are subject to the institution of hierarchy. The findings of this study suggest that individuals attach a substantial value to self-employment, and not because it is associated with superior instrumental outcomes, such as higher pay or lower working hours. Rather, self-employment is preferred because it provides individuals with more interesting work content and more autonomy of choice. These aspects are procedural characteristics of work, and therefore, self-employment can be seen as a source of procedural utility (see also Fuchs-Schuendeln, 2005 for related empirical evidence).

4.3. *Cultural differences*

Third, the results presented in the empirical section can give an indication of whether self-determination is valued differently in different cultures. In social sciences outside economics, it is often argued that self-determination may be important to people in “individualistic” Western cultures, like the United States, but not in more “collectivistic” non-Western cultural contexts, such as Asia (Iyengar and Lepper, 1999; Schwartz, 2000; Markus and Kitayama, 1991). Experimental evidence supports this view. For example, Iyengar and Lepper find that American individuals value the possibility of autonomously choosing between alternatives, whereas persons with an Asian cultural background often prefer that choices be made by others (especially by respected authorities). The analysis conducted here allows investigation of the issue in a non-experimental setting, where individuals are observed in their real work lives and arguably have substantial experience with either being independent or being employed in a hierarchical organization.

Our results show that self-determination is particularly valued in the Western hemisphere, but not exclusively so. Self-employed persons are found to be more satisfied with their jobs in essentially all the countries considered, including Asian countries such as Japan and in former communist countries of eastern Europe, where great importance used to be attached to collectivist decision-making. The analysis moreover indicates that also in non-Western countries, the higher job satisfaction of the self-employed is to a considerable extent based on the fact that individuals value characteristics of self-determination associated with self-employment. For example, in Japan, between 70 and 77 percent of the higher job satisfaction of self-

employed persons can be attributed to self-employed people perceiving their work as more interesting than people employed in organizations. The results thus do not support a culturalist view. Aspects of self-determination seem to be valued by individuals in many cultures.

4.4. Why do not more people become self-employed?

Given that self-employment offers substantial non-monetary benefits from work, the question arises of why more people do not choose to become self-employed. One explanation is that significant barriers of entry exist. In the economics literature, several factors have been identified that keep individuals from entering self-employment, despite an apparent large “latent entrepreneurship” in many countries (Blanchflower et al., 2001). The most important entry barrier seems to be the problem of start-up finance. A considerable number of studies has shown that persons wishing to set up their own enterprise face difficulties obtaining the necessary capital (e.g. Evans and Leighton, 1989; Lindh and Ohlsson, 1996; Blanchflower and Oswald, 1998; Van Praag et al., 2005). In a similar vein, it has been documented that the extent of administrative and regulative barriers for entering self-employment negatively affects the creation of new firms (Desai et al., 2003; Klapper et al., 2006). As a consequence, many people do not become self-employed, although they would actually value its non-monetary benefits.

A second explanation for the fact that most people do not choose self-employment rests on the important difference between job satisfaction and life satisfaction. In this paper, benefits of self-employment have been studied using job satisfaction as the dependent variable. However, work is just one domain of life, and self-employment may have significant costs accruing in other life domains that may offset the higher utility at the workplace. For example, it has been shown that self-employed persons are confronted with higher income fluctuations (Carrington et al., 1996), or that they face more work-family conflicts as a result of their longer working hours (Parasuraman and Simmers, 2001). This evidence suggests that self-employment can have a price in terms of life satisfaction that makes it an unattractive option for a considerable number of people. Indeed, Blanchflower (2004) shows that the relationship between self-employment and life satisfaction is much less clear-cut than the relationship between self-employment and job satisfaction. Using data from the World Value Surveys and the Eurobarometer Surveys, he documents that the self-employed are more satisfied with their lives than employees in about half of the countries considered, but not in others. Thus, remaining employed in an organization may be the optimal choice for most people despite the non-monetary benefits that self-employment offers.

5. Conclusions

In this paper, it has been shown that self-employed persons are more satisfied with their work than employees, mainly because they enjoy more interesting jobs and greater autonomy. This finding points to the importance of “doing what one likes” at the workplace. According to psychological theories, both autonomy and the chance to pursue interesting activities should be seen as important elements of a broader human need for self-determination. This notion has rarely been taken into account thus far in theoretical and empirical work in economics. However, taking the value of “doing what one likes” seriously promises to advance our understanding of what individuals value at the workplace. In a broader context, it also suggests that people do not value only outcomes, such as income or leisure, but derive independent utility from processes allowing for self-determination. This “procedural utility” seems not to be restricted to Western, individualistic cultures, but also appears to play a role in non-Western cultural contexts, such as Asia.

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