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Yannis Georgellis and Thomas Lange

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EVIDENCE FROM EASTERN AND WESTERN EUROPEAN LABOR MARKETS

Yannis Georgellis
Brunel University

Thomas Lange
Bournemouth University

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ABSTRACT

Based on data from the European Values Study (EVS), we compare the determinants of job satisfaction and the impact of union membership in Eastern and Western European labor markets. Correcting our regressions for union endogeneity and controlling for individual characteristics, values and beliefs, and important aspects of a job, we find a positive association between unionization and job satisfaction. This is contrary to the dominant view of the impact of unionization on job satisfaction suggesting that there is a strong, negative relationship between the two variables. We also uncover distinct attitudinal differences between Eastern and Western European employees, highlighting persistent influences of former communist labor relations.

Introduction

Many empirical studies in the job satisfaction literature suggest that being a member of a trade union has a negative impact on the employee's reported level of happiness at work (Hammermesh, 1977; Borjas, 1979; Odewahn & Petty, 1980; Kochan & Helfman, 1981; Freeman & Medoff, 1984; Meng, 1990). Several authors have used the voice hypothesis as the most popular explanation for this finding. As summarized by Pfeffer & Davis-Blake (1990: 260), "the voice hypothesis argues that unionization politicizes the work force and makes workers more critical towards the workplace and more willing to complain about problems. Thus unionization legitimizes and facilitates the expression of dissatisfaction …". Although the negative relationship between union membership and job satisfaction is widely reported in the empirical literature, a number of studies have questioned its validity on the grounds of imperfect data and modeling techniques (Pfeffer & Davis-Blake, 1990; Bender & Sloane, 1998). But small sample sizes, lacking data on important aspects of a job, and limited cross-national data sets covering satisfaction and union membership information, especially for Eastern European countries (Sousa-Poza & Sousa-Poza, 2000), have been particularly highlighted as causes for concern. What is more, many empirical studies treat selection into union membership as a given – a technique, which may lead to significant estimation biases. The study by Bryson et al. (2004) is a notable exception, providing evidence that the negative relationship between unions and job satisfaction disappears or at least weakens when controlling for the endogeneity of union status.

The aim of this study is to fill the gap in the empirical literature by comparing the levels and determinants of job satisfaction and the impact of union membership across a large number of Eastern and Western European labor markets. To this end, we use data derived from the 1989-1993 and 1999-2004 waves of the European Values Study (hereafter EVS), covering 14 Eastern European, and 11 Western European countries. EVS is arguably

unprecedented in scope, covering basic values in all the major life spheres, and provides a wealth of unique information. In the context of the present study, the data set has the main advantage of providing information on union membership, job satisfaction, demographics and various labor market characteristics, such as earnings, education, full and part-time employment status and occupational level of respondents. EVS also captures several variables reflecting important aspects of a job, such as pay, job security, working hours, initiative, responsibility, and interaction with colleagues. We use this information to identify the levels and determinants of job satisfaction in Eastern and Western Europe and address the technical criticism of previous studies by correcting the satisfaction equations for union membership endogeneity whilst also controlling for several socio-demographic variables. As the EVS data was collected broadly a decade after the transition to a market economy commenced, we are able to compare our results with earlier, albeit incomplete findings and draw conclusions on the persistence (or otherwise) of the impact of communist labor relations on job satisfaction. Our analysis further extends to include an assessment of the impact of employees' views on competition, state control, and inequality. As such, our results also intend to advance knowledge by exploring the influences of individual values and beliefs on employee attitudes and job satisfaction.

After correcting our empirical specifications for union membership-job satisfaction endogeneity and controlling for various personal characteristics as well as important aspects of a job, this study, the first to empirically examine the unionization-job satisfaction relationship in a comparative, European context, finds that the widely reported negative relationship between unionization and job satisfaction not only diminishes – as indicated in some recent studies (Bender & Sloane, 1998; Bryson et al., 2004) - but that a positive correlation between the two variables can be observed. Whilst the latter result holds true for both, Eastern and Western Europe, the study also highlights a number of important aspects in

the relationship with job satisfaction that characterize distinctly different attitudes amongst Eastern and Western European employees.

The remainder of this paper is organized as follows: first, we briefly review the relationship between union membership and job satisfaction and synthesize the empirical results and methodologies from previous studies. We then discuss our data and introduce the empirical framework, followed by the results and interpretations of our analysis. We draw our arguments to a close and present our conclusions in the final section of the paper.

Union Membership and Job Satisfaction

The relationship between union membership and job satisfaction has developed into a prominent feature in the corporate bargaining literature. By reference to both, pay and non-pecuniary factors union objectives can be generally described as an endeavor for the purpose of maintaining and improving the conditions of employment, workers' welfare, and satisfaction by influencing the working environment and wages. This suggests that the widely reported, negative relationship between unionization and job satisfaction is paradoxical. However, it has been argued that unionized employment is inherently more unpleasant than non-union employment, with the union wage effect merely serving as a compensating differential that may be insufficiently large to counter less desirable working conditions (Bender & Sloane, 1998). Although for some a theoretically attractive proposition, the evidence in support of this argument remains unsatisfactory. Borjas (1979), for example, points out that the impact of unionization on satisfaction remains significant and negative even when the wage variable is omitted from the estimating equation. Yet, it is equally plausible to contend that unions reduce wage inequality (Bloch & Kuskin, 1978; Pfeffer & Ross, 1980), and that this perception of equitable treatment can lead to higher satisfaction

ratings. In a similar vein, it can also be argued that corporate bargaining that focuses on providing workers with some control over their work, job security, working hours and interactions with colleagues can increase employees' reported levels of satisfaction. Interestingly, Gomez-Mejia & Balkin (1984) found that with the exception of a positive link between union membership and satisfaction with pay, unionization was unrelated to other dimensions of job satisfaction. Berger et al. (1983) suggest that unions affect job outcomes (e.g. pay, degree of job complexity etc.) that in turn affect job satisfaction. However, the effect on job satisfaction depends on the extent at which employees value these job outcomes and therefore, after controlling for employees values the effect of union membership on job satisfaction may disappear. Evans & Ondrack (1990) replicate Berger et al.'s (1983) findings and find that after controlling for job complexity, there is no relationship between unionization and satisfaction with work itself, but they find a statistically significant relationship between unionization and satisfaction with pay.

Notwithstanding the arguments for a positive relationship between unionization and job satisfaction, the dominant empirical perspective suggests that unionized employment reduces job satisfaction. As summarized by Freeman & Medoff (1984: 136), "in survey after survey of job satisfaction, unionized workers … report themselves less satisfied with most facets of their work". It is against this background that the voice hypothesis gained in popularity. Whilst lower levels of satisfaction in unionized jobs may suggest, as a possible outcome, a move to another job or place of employment (Burdett & Mortensen 1998), the voice hypothesis, sometimes referred to as 'exit-voice hypothesis', offers an alternative, behavioral explanation. Specifically, it argues that those affected by low satisfaction levels internalize the costs of quitting behavior and decide instead to join a trade union, utilizing the union's collective voice to express dissatisfaction or convey grievances to the employing organization. In this context, it follows that dissatisfaction favors union membership.

Many studies in the empirical literature confirm the latter assertion by providing evidence of a negative relationship between unionization and job satisfaction. However, a number of studies have expressed concerns about some underlying assumptions as well as some methodological and data deficiencies. For example, the lack of appropriate statistical information and a generally skeptical stance as to the use of subjective well-being data continues to limit empirical knowledge on job satisfaction (Pfeffer & Davis-Blake, 1990; Hammermesh, 2001). To be fair, the latter constraint has been addressed as social scientists as well as management and human resource management academics and practitioners have admitted job satisfaction into the realm of empirical analysis because of its impact on actual employee behavior. Examples include job satisfaction's impact on non-cooperative behavior, lateness behavior, lower levels of employees' efforts, job performance, absenteeism, and quits (Futrell, 1977; Freeman, 1978; Weiss, 1980; Akerlof et al., 1988; Hall & Buttram 1994; Clark et al., 1998; Hammermesh, 2001). In the context of job satisfaction as a dependent variable, other studies have examined the impact of age, race, gender, educational achievements, and availability of training on employees' reported levels of happiness at work (Wright & Hamilton, 1978; Bartle, 1981; Clark, 1997; Georgellis & Lange 2007)[1].

However, data deficiencies including the use of single-item job satisfaction measures, the lack of information on important aspects of a job, and limited comparability between countries remain serious barriers to learning more about the impact of trade union membership on job satisfaction across European labor markets. Indeed, the use of single-item measures of complex attitude structures remains a controversial one, as such measures tend to have only marginally acceptable internal consistency (see e.g. Wanous et al., 1997; Rose, 2005). On a positive note, the meta-analysis of US data sets by Wanous et al. (1997) gives the use of single–item measures a cautious thumps-up. Rose (2005) raises similar concerns

on the use of single-item measures, but he also adopts a more pragmatic attitude towards the use of such measures and proceeds with his analysis of employee despondency in the UK.

On whether the lack of information on important job aspects introduces a possible 'omitted variables' bias in empirical work, Pfeffer & Davis-Blake (1990: 263-64) remind us that "past research has done a relatively poor job of accounting for the fact that the presence of a union is likely to be associated with unfavorable workplace conditions. Unions are most likely to exist when workers have noxious jobs and little control over the conditions of their work". This implies that the widely reported negative relationship between unions and job satisfaction may be the result of what has been included and what has been ignored in empirical estimations used to determine union effects on reported levels of satisfaction.

What is more, the growing number of studies on satisfaction and subjective well being in general, and on the link between unionization and job satisfaction in particular, draw on a relatively small number of regional or national data sets, primarily aimed at Western Europe and the United States (Diener et al., 1995; Spector, 1997; Blanchflower & Oswald, 2004). Job satisfaction in Eastern Europe, to take a very different example, received comparatively little attention in this field of research (Sousa-Poza & Sousa-Poza, 2000). Many commentators on former communist regimes have argued that Soviet-style labor relations produced de-motivated, demoralized, and less satisfied workers than free market practices. This is because industrial and labor relations in the ex-Soviet union were characterized by undesirable working conditions, workers deprived of normal market modes of responding to these conditions and trade unions acting as political 'transmission belts' rather than independent representatives of workers (Haraszti, 1978; Petkov & Thirkell, 1991; Hethy and Kyloh, 1995). If shown to be a sustained characteristic of Eastern European labor markets, this argument may have significant implications for the evolving process of European labor market integration. However, to test this expectation empirically, only few comparable

survey instruments are available to allow analysts to compare workers' attitudes towards their jobs in historically communist economies and market economies. Notable exceptions include the analyses by Blanchflower & Freeman (1997) whose findings cover the beginning of the transition to a market economy, and Sousa-Poza & Sousa-Poza (2000) whose study focuses on survey data collected in 1997. Both studies draw on the International Social Survey Programme (ISSP) for their empirical examinations. However, in both studies the number of Eastern European countries examined remains relatively small. The early inferences about Eastern European job satisfaction by Blanchflower & Freeman (1997), using the 1989 ISSP, were made on the basis of only one Eastern European country, Hungary, as a proxy for all of Eastern Europe. The study by Sousa-Poza & Sousa-Poza (2000) utilized the 1997 ISSP, which included data for five Eastern European countries: Hungary, Russia, Slovenia, Bulgaria, and the Czech Republic. Although promising at first sight, small sample sizes and missing data have again led to empirical limitations and exclusions. It follows that the empirical evidence on Eastern European job satisfaction after the collapse of command economies remains incomplete.

Finally, we must draw attention to a common, methodological flaw in many previous studies, which treat selection into union membership as a given. This problem, known as 'endogeneity bias', refers to the fact that an independent variable included in the model is potentially a choice variable, correlated with unobservables relegated to the error term. The dependent variable, however, is observed for all observations in the data. In the context of this study, the problem can be explained by reference to 'reverse causation': a union member reports lower levels of satisfaction simply because a less satisfied worker is more likely to join a trade union. In this case, the union variable and the error term in the regression will be correlated, and the estimates of the impact of unionization on job satisfaction will be biased. This estimation problem together with small sample sizes for individual countries makes it

difficult to arrive at robust empirical results, which can be generalized. In response to these concerns, we address matters by creating pooled data samples for Eastern and Western Europe, and by correcting our regression equation for endogeneity between job satisfaction and unionization whilst also controlling for several, individual characteristics. Our study thus compares groups of Eastern and Western European countries rather than single labor markets. Whilst the danger of this approach is that we may miss important details and contrasts between more narrowly defined groups, we mitigate the danger by including respective country dummies in our regressions. Above all, we work with the operative hypothesis that traditional market and ex-communist experiences are sufficiently similar across respective labor markets to leave identifiable common legacies affecting the relationship between union membership and job satisfaction in each region.

Against this background, we study the relationship between union membership and job satisfaction in Eastern and Western Europe and present our results and interpretations for which the data and variables and our empirical framework are brought forward in the following pages.

Data and Empirical Framework

To examine the link between union membership and job satisfaction, we use data for 14 Eastern European and 11 Western European countries from the third and fourth waves of the European Values Study (hereafter EVS). Halman (2001) provides a detailed description of the EVS project design, survey questionnaire and methodology. The countries included in the sample are Austria, Belgium, Bulgaria, Belarus, Croatia, Czech Republic, Estonia, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Ukraine, United Kingdom, and Northern Ireland.

The EVS data contains information on job satisfaction compiled from responses to the question: "*Overall, how satisfied or dissatisfied are you with your job?*". The survey responses are given on a scale *1* to *10*, with *1 = Extremely Dissatisfied* and *10 = Extremely Satisfied*. The EVS data also provides a rich set of standard demographic and labor market characteristics that we use as controls in our job satisfaction regressions. Such controls include job, personal and demographic characteristics as well as values and beliefs about important aspects of one's economic and social life. Information on the subjective evaluation of important aspects of a job is also available. We limit our sample to male workers in salaried employment, aged between 18 and 65. By excluding observations with missing values, we obtain an effective sample of 2133 and 1793 observations for Eastern and Western European workers, respectively.

Based on the above sample, we estimate job satisfaction equations using an ordered probit specification, introduced in the literature by McKelvey & Zavoina (1975). The ordered probit specification assumes that a latent and continuous measure of the dependent variable, a proxy for utility, is given by:

$$S_i^* = \beta' z_i + e_i,$$
(1)

where z_i is a vector of explanatory variables describing individual characteristics, β is a vector of parameters to be estimated and e_i is a random error term, which is normally distributed.

The observed and coded discrete dependent variable S_i is determined from the model as follows:

$$
S_i = \begin{cases}
1 & if \ -\infty \le S_i^* \le \mu_1 \\
2 & if \ \ \mu_1 < S_i^* \le \mu_2 \\
3 & if \ \ \mu_2 < S_i^* \le \mu_3 \\
& \quad . \\
& \quad . \\
& \quad . \\
10 & if \ \ \mu_9 < S_i^* \le \infty
\end{cases}
\qquad (1a)
$$

where μ_i represents thresholds to be estimated (along with the parameter vector β). Positive signs for the estimated parameters β indicate higher levels of job satisfaction as the value of the associated variable increases.

To address the issue of the possible endogeneity of union status, we re-estimate the job satisfaction equation by adopting the treatment effect method, a slight generalization of Heckman's (1979) bivariate selection model, as union status is observed for all observations in our sample. In this context, job satisfaction equations for union and non-union members are given by

$$JS_{ui} = \beta_u X_i + \varepsilon_i, \qquad\qquad 2(a)$$

$$JS_{nui} = \beta_{nu} X_i + \varepsilon_i, \qquad\qquad 2(b)$$

and

$$JS_i = D_i \, JS_{ui} + (1 - D_i) \, JS_{nui}. \qquad\qquad 2(c)$$

Union membership is determined by

$$D_i^* = Z_i \, \gamma + u_i, \qquad\qquad 2(d)$$

where $D_i^* = 1$ if $D_i > 0$ and $D_i^* = 0$ otherwise.

The model is estimated using the '*treatreg*' command in STATA. In this model, the estimated union status coefficient shows the average effect on job satisfaction of belonging to a union, under the restriction that the estimated coefficients for the remaining explanatory variables in the job satisfaction equation are the same for union and non-union workers.

The Results

Based on the above sample and empirical specifications, we first follow the traditional methodological approach and estimate an ordered probit model, controlling for personal characteristics, educational achievements, values and beliefs, and important aspects of a job to uncover the relationship between union membership and job satisfaction. This choice of model is usually appropriate and theoretically superior to most other models for the ordinal, categorical job satisfaction data we intend to examine.[2] However, in recognition of the problem of reverse causation, we subsequently express our regression as a linear model and correct this specification for unionization-job satisfaction endogeneity.

The empirical findings in previous studies lead us to believe that union members tend to report lower satisfaction levels than non-members. We thus commence our analysis with simple, descriptive statistics to examine the validity of this argument. As shown in Table 1, differences in the mean job satisfaction scores between union and non-union members are apparent. For the period 1989-1993 at least, whilst in Western Europe union members tend to report lower job satisfaction scores than non-union members the opposite is true for Eastern Europe, where the mean job satisfaction score of union members is 0.124 higher than that of non-union members. Such a difference is statistically significant at the 5% level. However, evidence based on the latest wave of the EVS (1999-2004) hints to the existence of a negative

relationship between union membership and job satisfaction, whereby union members report lower job satisfaction scores than non-union members.

(Table 1 about here)

In a similar vein, differences in the relationship with important aspects of a job become evident when we compare reports for Eastern and Western Europe. As shown in Table 2, union members in Western Europe are likely to value all job attributes with the exception of 'Responsibility' and 'Promotion' more highly compared to non-union members. In contrast, union members in Eastern Europe on average assign greater value to 'Pay', 'Hours', 'Interaction with colleagues' and 'Promotion' than non-union members, at least for the period 1989-1993. Interestingly, the identification of 'Interaction with colleagues' as an important aspect of a job shows remarkably similar patterns across Eastern and Western Europe, which may signal potentially significant attitudinal changes in the workplace in Eastern Europe, where, during communist days, group work was seen as part and parcel of command-style production lines. In fact, in traditional socialist societies, qualities associated with individual motivation such as achievement, ambition and initiative were viewed with suspicion and contempt. Risk taking was suppressed and individuals showing signs of excelling within a group were seen as destructive for group harmony (Longenecker & Popovski, 1994). However, by 1999-2004, there is evidence of a shift in union member's preferences towards 'Job security' and having a 'Respected' job. These findings are perhaps not surprising. As a result of the introduction of market mechanisms in Eastern Europe, guaranteed employment and job security gave way to competitive labor markets and high levels of unemployment. Huddlestone & Good (1999: 2) observe that "owing to lack of desirable consumer products, traditionally, wages were not a motivating factor in command

economies"[3]. Following the transition from a command to a market-led economy, we deduce that pay, job security developed into premium job attributes, and our results, consistent with findings by Sousa-Poza & Sousa-Poza (2000), may be explained on this basis.

(Table 2 about here)

Turning our attention to the determinants of job satisfaction, the results of the ordered probit model are shown in columns 1 and 3 of Table 3 for the Western and Eastern European samples respectively. As the results show, union membership has a negative, statistically significant impact on job satisfaction for the Eastern European sample whilst the effect for the Western European sample is not statistically significant at conventional levels. However, after expressing our specifications in the form of a linear model, corrected for unionization-job satisfaction endogeneity (columns 2 and 4 in Table 3), we find that union membership in both, Eastern and Western Europe displays a statistically significant, positive correlation with job satisfaction. This result stands in stark contrast to the literature's conventional wisdom, which predicts a statistically strong, negative correlation between the two variables. It implies that a selection effect, rather than a causal effect, is accountable for the widely reported, negative relationship between union membership and job satisfaction. The correction is based on a "union" participation regression in the first stage of the TREATREG procedure in STATA.[4] One of the key variables included in the union participation equation, and omitted from the satisfaction equation, is whether respondents have confidence in labor unions. The inclusion of this variable in the union participation equation is motivated by a large literature on union commitment as a key determinant of union participation (Sverke & Kuruvilla, 1995; Fulagar & Barling, 1989)[5]. The union participation equation includes

whether workers are interested in politics as an additional explanatory variable, which is not included in the job satisfaction regression. These results, reported in the Appendix.

We thus suggest that the results of uncontrolled, ordered probit regressions present the 'gross effect' of European unionization, which is likely to be biased by problems of reverse causation. Correcting our regressions for the latter effect and controlling for several personal characteristics as well as important aspects of a job, we interpret the coefficients on union membership to be the respective 'net effect', which supports the unusual stance that unionization serves as a positive influence on job satisfaction. By way of logical extension and in view of our findings, we also suggest, perhaps controversially, that the voice hypothesis, although an attractive theoretical proposition in response to the negative impact of unionization on job satisfaction, becomes now a redundant explanation. However, as shown by Iverson & Currivan (2003), 'union voice' may still serve as a powerful rationalization of quit behavior amongst active union members, irrespective of high or low levels of job satisfaction.

Following our corrections to the linear model, we also find a relationship between age and job satisfaction, which is consistent with the findings of previous studies. Most notably, our results support the hypothesis of a U-shaped relationship between job satisfaction and age. Clark et al. (1996) attribute the U-shaped relationship to individuals' personal circumstances and life-stage, non-job factors that affect job satisfaction. Being the main earner in the household is positively associated with job satisfaction, although the effect is statistically significant only for employees in Eastern Europe. In contrast to western secular societies, this effect for male employees in Eastern Europe may be explained by the prevalence of traditional values in Eastern European family structures. The position of men in socialist societies depended on their standing at work, and their respect within the household depended largely on their role as primary breadwinners. In fact, the role as main earner retained its

importance as a component of masculine identities. Although male employees were rarely the sole earners in Eastern European families, they tended to earn more than female employees did. Moreover, the experiences of men in post-transformation Eastern Europe, compared to those of women, led in the sociological literature to the description of 'male marginalization', both at work and in the household (Kiblitskaya, 2000). Retaining the role as main earner some ten years after the transformation from a communist to a market-led economy commenced may thus serve as a considerably more powerful source of job satisfaction than is the case for male employees in Western Europe (Crompton, 1999). Our results seem to confirm this tentative interpretation, holding true for the Eastern European sample whilst displaying statistically insignificant coefficients for Western European employees.

In both, our corrected and uncorrected regressions, middle and upper levels of income provide positive associations with job satisfaction, although the overall impact is again statistically significant for the Eastern European sample. The result is consistent with findings by Sousa-Poza & Sousa-Poza (2000) who report that high income for Eastern European workers, compared to their Western European counterparts, is an important determinant of job satisfaction.

Finally, our results on individual values and beliefs as well as important aspects of a job re-confirm distinct Eastern-Western European patterns in the relationship with job satisfaction. Following our correction for endogeneity, we find amongst employees who believe that 'competition is good' a strong, positive association with job satisfaction, but only in Western Europe. Similarly, amongst Eastern European employees who believe that 'We need larger income differences as incentives' the correlation with job satisfaction is strong and positive whereas this is not the case for Western Europe. In contrast, the belief that the "State should give more freedom to firms" leads to a significant and positive association with job satisfaction in Western Europe. In the case of Eastern Europe, such a positive effect is evident in the ordered probit specification, perhaps not surprisingly in a region where, during

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the breakdown of communism and the transition to a more capitalistic system, former command-economic principles and firms' dependence on the state led to many economic and social problems (Blanchard et al., 1994; Svejnar, 2002). However, this result disappears when controlling for the endogeneity of union status, as unobserved characteristics influencing individuals' propensity to become union members are likely to influence also their attitudes towards state intervention in business. In the context of important aspects of a job, we find only in Western Europe a strong, negative relationship between job satisfaction and 'Hours of work'. Working in a 'Responsible job' and 'Interaction with colleagues' display a strong and positive correlation with job satisfaction in both regions.

(Table 3 about here)

As the results in Table 4 show, a positive and statistically significant relationship between union membership and job satisfaction is also apparent in the case of women in Eastern Europe. Other results in Table 4 reveal a similar pattern regarding the determinants of job satisfaction, as in the case for men.

Summary and Conclusions

Drawing on a rich data set that covers a large number of Eastern and Western European countries, this paper re-examined the widely reported negative relationship between unionization and job satisfaction. The study makes two important contributions to the literature.

First, after correcting our regressions for union endogeneity as well as controlling for individual characteristics, values and beliefs, and important aspects of a job, we present cross-

European evidence in support of the argument that trade union membership displays a positive association with workers' reported levels of job satisfaction. This questions the validity of previous studies whose reports of a negative relationship between unionization and job satisfaction neglected the required correction for reverse causation and derived from regional or national data sets, primarily covering areas in Western Europe and the United States. It also reduces the credibility of the 'voice hypothesis' as an explanation of the influence of unionization on workers' job satisfaction.

Second, since Eastern European countries are reportedly underrepresented in this area of research, we advance our knowledge by including 14 Eastern European alongside 11 Western European countries in our regression analysis. In doing so, we uncover substantial differences between respondents in former communist countries and those in traditionally market-led, western economies. Specifically, we find patterns of differences, which lead us to believe that, compared to their Western European counterparts, Eastern European workers hold markedly different views of and attitudes towards job satisfaction. Despite an ever growing literature on the accession of Eastern European economies to an enlarged European Union and the accompanying implications for an integrated European labor market (Drinkwater et al., 2009; Boeri & Brucker, 2005), it is surprising that relatively little is known about the level and determinants of workers' job satisfaction in Eastern Europe. We suggest that reported levels of job satisfaction in Eastern Europe are influenced by individual characteristics, job aspects, values and beliefs, which evince traits of a legacy of the region's communist past as well as subsequent experiences with economic and social transition. Whilst our study offers some tentative interpretations for these findings, we concede that these influences, and their implications for the evolving process of European labor market integration, are complex ones and as yet not fully understood.

NOTES

+ The data used in this study were made available by the Central Archive for Empirical Social Research, Cologne, Germany.

1 See Saari & Judge (2004) for a systematic summary of the most commonly used variables and their impact on job satisfaction in the HR and organizational psychology literature.

2 See McKelvey & Zavoina (1975) for a detailed description of the ordered probit specification.

3 According to an analysis by Standing (1991), for example, wages were found to motivate only 10 percent of Russian industrial workers.

4 The positive relationship between union membership and job satisfaction is preserved even when estimating the TREATREG model based on the 1999-2004 sample only.

5. Bamberger et al. (1999) provide a meta-analysis of the antecedents and consequences of union commitment.

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Table 1
Differences in job satisfaction (JS) between union and non-union members:
Two-sample *t* test of the null hypothesis
H$_o$: Mean JS (Union) – Mean JS (Non-Union) = 0

	WESTERN EUROPE	*EASTERN EUROPE*
WAVE 2 *1989-1993*	-0.157*	0.124*
WAVE 3 *1999-2004*	0.022	-0.188*

Notes: * significant at the 5% level.

Table 2
Evaluation of important job aspects, union vs. non-union members
Two-sample *t* test of the null hypothesis
H₀: Mean (Union) – Mean (Non-Union) = 0

	WESTERN EUROPE		EASTERN EUROPE	
	WAVE 2 1989-1993	WAVE 3 1999-2004	WAVE 2 1989-1993	WAVE 3 1999-2004
Important Job Attributes				
Pay	0.050*	0.044*	0.028*	0.010[+]
Job security	0.133*	0.057*	-0.011	0.023*
Respected	0.089*	0.087*	-0.012	0.052*
Hours	0.072*	0.064*	0.041*	0.007
Initiative	0.043*	0.076*	-0.006	0.003
Achievement	0.056*	0.055*	-0.005	-0.008
Responsibility	-0.017[+]	-0.024[+]	-0.009	0.0001
Interaction with colleagues	0.032*	0.079*	0.077*	0.017[+]
Promotion	-0.038*	0.021	-0.022*	-0.010

Notes: * significant at the 5% level; [+] significant at the 10% level.

Table 3
Union membership and job satisfaction (Men)

	WESTERN		EASTERN	
	Ordered	Linear	Ordered	Linear
Constant		7.337*		8.254*
		(0.762)		(1.007)
Union member	-0.078	1.088*	-0.091+	1.269*
	(0.060)	(0.418)	(0.053)	(0.550)
Age	-0.058*	-0.094*	-0.029+	-0.089*
	(0.019)	(0.034)	(0.016)	(0.041)
(Age)2	0.075*	0.115*	0.031+	0.096+
	(0.023)	(0.041)	(0.019)	(0.049)
Marital status				
Married	0.205*	0.411*	0.047	0.009
	(0.069)	(0.124)	(0.073)	(0.195)
Living together as married	0.010	-0.536		
	(0.286)	(0.511)		
Divorced	0.05	0.063	-0.037	-0.076
	(0.121)	(0.217)	(0.122)	(0.304)
Separated	0.484*	0.690+	-0.547*	-1.028*
	(0.229)	(0.411)	(0.199)	(0.510)
Widowed	0.345	0.666	0.262	0.505
	(0.267)	(0.474)	(0.255)	(0.694)
Main earner	0.142	0.175	0.181*	0.373*
	(0.095)	(0.173)	(0.063)	(0.160)
Education				
Middle	-0.010	-0.013	0.001	0.01
	(0.064)	(0.115)	(0.072)	(0.182)
Upper	0.011	0.139	-0.095	-0.261
	(0.084)	(0.151)	(0.103)	(0.274)
Income				
Medium	-0.051	-0.105	0.168*	0.286+
	(0.077)	(0.141)	(0.067)	(0.168)
High	0.079	0.056	0.333*	0.742*
	(0.083)	(0.151)	(0.069)	(0.172)
Occupation				
Professional worker		0.506*	0.483*	0.300
		(0.245)	(0.127)	(0.339)
Middle level non-manual	-0.116	0.244	0.411*	0.332
	(0.087)	(0.221)	(0.126)	(0.329)
Junior level non manual	0.00006	0.423+	0.334*	
	(0.108)	(0.229)	(0.133)	
Foreman and supervisor	-0.083	0.366	0.381*	-0.083
	(0.112)	(0.239)	(0.127)	(0.335)

Table 3 – continued
Union membership and job satisfaction (Men)

	WESTERN		EASTERN	
	Ordered	**Linear**	**Ordered**	**Linear**
Skilled manual	-0.051	0.337	0.215*	-0.209
	(0.100)	(0.207)	(0.105)	(0.293)
Semi-skilled manual worker	-0.159	0.231	0.134	-0.392
	(0.115)	(0.228)	(0.108)	(0.302)
Unskilled manual	-0.179			-0.985*
	(0.137)			(0.356)
Attitude towards competition				
Competition is good	0.414*	0.866*	-0.289*	-0.062
	(0.191)	(0.280)	(0.140)	(0.353)
Attitude towards state intervention in				
State should give more	-0.141	0.592*	0.215*	0.443
	(0.131)	(0.285)	(0.108)	(0.292)
Attitudes towards income inequality				
We need larger income	0.124	0.233	0.197*	0.506*
	(0.123)	(0.222)	(0.093)	(0.254)
Important in a job				
Pay	-0.061	-0.08	-0.066	-0.204
	(0.067)	(0.120)	(0.084)	(0.225)
Job security	0.061	0.044	-0.038	-0.22
	(0.058)	(0.105)	(0.056)	(0.146)
Respected	0.011	-0.033	0.024	-0.021
	(0.057)	(0.103)	(0.056)	(0.141)
Hours	-0.145*	-0.247*	-0.097+	-0.164
	(0.055)	(0.099)	(0.051)	(0.133)
Initiative	0.057	0.062	0.009	-0.126
	(0.059)	(0.106)	(0.057)	(0.147)
Achievement	-0.034	-0.028	-0.097+	-0.116
	(0.057)	(0.103)	(0.058)	(0.150)
Responsibility	0.118*	0.189+	0.286*	0.689*
	(0.057)	(0.102)	(0.057)	(0.144)
Interaction with colleagues	0.159*	0.230*	0.103+	0.263+
	(0.065)	(0.116)	(0.055)	(0.139)
Promotion	-0.033	0.027	-0.049	-0.104
	(0.061)	(0.109)	(0.056)	(0.149)
Observations	1793	1754	2133	1576

Notes: Standard errors in parentheses;* significant at the 5% level; [+] significant at the 10% level. All regressions include country and time dummy variables.

Table 4:
Union membership and job satisfaction (Women)

	WESTERN		EASTERN	
	Ordered	Linear	Ordered	Linear
Constant		7.795*		7.336*
		(1.005)		(1.031)
Union member	-0.024	0.273	0.110*	1.373*
	(0.083)	(0.503)	(0.051)	(0.518)
Age	-0.045+	-0.055	-0.016	-0.054
	(0.024)	(0.042)	(0.017)	(0.046)
(Age)2	0.063*	0.076	0.026	0.076
	(0.030)	(0.052)	(0.021)	(0.056)
Marital status				
Married	0.224*	0.329*	0.175*	0.181
	(0.093)	(0.162)	(0.075)	(0.208)
Living together as married	-0.483	-0.914+		
	(0.303)	(0.526)		
Divorced	-0.041	-0.036	0.156+	0.179
	(0.122)	(0.213)	(0.092)	(0.240)
Separated	-0.021	-0.109	-0.222	-0.856+
	(0.212)	(0.361)	(0.174)	(0.459)
Widowed	0.265	0.372	0.014	-0.101
	(0.269)	(0.472)	(0.114)	(0.301)
Main earner	0.032	0.03	0.168*	0.480*
	(0.084)	(0.149)	(0.050)	(0.131)
Education				
Middle	0.009	0.013	-0.147+	-0.325
	(0.090)	(0.160)	(0.081)	(0.205)
Upper	-0.022	-0.034	-0.167	-0.522+
	(0.113)	(0.196)	(0.103)	(0.269)
Income				
Medium	0.186+	0.318+	0.102	0.309*
	(0.100)	(0.174)	(0.063)	(0.155)
High	0.165	0.336+	0.271*	0.761*
	(0.112)	(0.199)	(0.069)	(0.179)
Occupation				
Professional worker	0.349+	0.556+	0.260	1.240*
	(0.183)	(0.317)	(0.160)	(0.278)
Middle level non-manual	0.218	0.302	0.189	1.097*
	(0.173)	(0.298)	(0.158)	(0.252)
Junior level non manual	0.091	0.128	0.039	0.927*
	(0.168)	(0.290)	(0.163)	(0.271)

Table 4 – continued
Union membership and job satisfaction (Women)

	WESTERN		EASTERN	
	Ordered	Linear	Ordered	Linear
Skilled manual	0.113	0.248	-0.041	0.630*
	(0.216)	(0.378)	(0.162)	(0.256)
Semi-skilled manual worker	-0.039	-0.161	-0.089	0.567*
	(0.201)	(0.350)	(0.166)	(0.254)
Unskilled manual	0.026	-0.011	-0.327+	
	(0.202)	(0.353)	(0.170)	
Attitude towards competition				
Competition is good	0.162	-0.111	0.143	0.341
	(0.233)	(0.393)	(0.118)	(0.303)
Attitude towards state intervention in				
State should give more	-0.028	-0.12	-0.031	-0.089
	(0.206)	(0.342)	(0.111)	(0.291)
Attitudes towards income inequality				
We need larger income	-0.107	0.028	0.096	0.414+
Important in a job				
Pay	-0.144+	-0.288*	-0.244*	-0.540*
	(0.084)	(0.146)	(0.073)	(0.195)
Job security	-0.076	-0.184	-0.004	-0.007
	(0.075)	(0.135)	(0.055)	(0.143)
Respected	0.059	0.160	0.048	0.170
	(0.076)	(0.131)	(0.051)	(0.134)
Hours	-0.093	-0.143	-0.071	-0.243+
	(0.072)	(0.126)	(0.048)	(0.126)
Initiative	0.075	0.113	0.042	0.105
	(0.079)	(0.138)	(0.056)	(0.147)
Achievement	0.05	0.082	-0.05	-0.177
	(0.076)	(0.133)	(0.054)	(0.141)
Responsibility	0.255*	0.377*	0.223*	0.541*
	(0.077)	(0.133)	(0.055)	(0.143)
Interaction with colleagues	0.248*	0.406*	0.084	0.252+
	(0.090)	(0.157)	(0.055)	(0.142)
Promotion	-0.141+	-0.206	-0.118*	-0.363*
	(0.080)	(0.138)	(0.055)	(0.145)
Observations	1061		2314	1690

Notes: Standard errors in parentheses;* significant at the 5% level; + significant at the 10% level. All regressions include country and time dummy variables.

Selection equations: Prob (Union Member)

	MEN		WOMEN	
	WESTERN EUROPE	EASTERN EUROPE	WESTERN EUROPE	EASTERN EUROPE
Constant	-1.209+	-1.784**	-2.199*	-1.846*
	(0.673)	(0.690)	(1.037)	(0.698)
Age	0.015	0.052+	0.051	0.090*
	(0.028)	(0.026)	(0.038)	(0.029)
(Age)2	0.00005	-0.057+	-0.047	-0.101*
	(0.034)	(0.031)	(0.047)	(0.035)
Marital status				
Married	-0.170+	0.319*	-0.141	0.069
	(0.101)	(0.125)	(0.149)	(0.132)
Living together as married	0.45		-0.184	
	(0.411)		(0.539)	
Divorced	0.015	0.226	-0.282	0.076
	(0.171)	(0.195)	(0.198)	(0.151)
Separated	0.393	-0.184	0.026	0.211
	(0.320)	(0.352)	(0.310)	(0.279)
Widowed	-0.655	0.736+	-0.289	0.193
	(0.401)	(0.390)	(0.474)	(0.186)
Main earner	0.302*	-0.01	0.211	-0.097
	(0.145)	(0.101)	(0.129)	(0.082)
Education				
Middle	-0.014	-0.01	-0.306*	-0.094
	(0.093)	(0.116)	(0.144)	(0.132)
Upper	-0.339**	-0.304+	-0.17	0.042
	(0.127)	(0.175)	(0.182)	(0.171)
Income				
Medium	0.224+	0.133	0.103	-0.094
	(0.116)	(0.103)	(0.161)	(0.094)
High	0.196	0.059	0.414*	-0.269*
	(0.125)	(0.108)	(0.181)	(0.105)
Occupation				
Professional worker		0.424+	-0.365	0.602*
		(0.224)	(0.275)	(0.165)
Middle level non-manual office worker	0.098	0.063	-0.201	0.442*
	(0.130)	(0.225)	(0.259)	(0.150)
Junior level non manual	0.091		-0.156	0.337*
	(0.159)		(0.252)	(0.167)
Foreman and supervisor	0.027	0.470*		
	(0.165)	(0.218)		
Skilled manual	0.071	0.350+	-0.530	0.407*
	(0.150)	(0.200)	(0.345)	(0.159)
Semi-skilled manual worker	-0.022	0.144	-0.356	0.054
	(0.173)	(0.208)	(0.310)	(0.161)
Unskilled manual	0.12	0.117	-0.489	
	(0.199)	(0.241)	(0.310)	
Attitude towards competition				
Competition is good	-0.463+	-0.455+	0.458	0.139
	(0.276)	(0.263)	(0.432)	(0.283)

Selection equations: Prob(Union Member)

	MEN		WOMEN	
	WESTERN EUROPE	*EASTERN EUROPE*	*WESTERN EUROPE*	*EASTERN EUROPE*
Attitude towards state intervention in				
State should give more	-0.488*	0.015	0.176	-0.260
	(0.222)	(0.186)	(0.384)	(0.173)
Attitudes towards income inequality				
We need larger income	-0.446*	0.108	-0.320	-0.014
	(0.188)	(0.161)	(0.285)	(0.142)
Important in a job				
Pay	0.066	0.078	0.128	0.144
	(0.099)	(0.145)	(0.132)	(0.125)
Job security	0.167+	0.224*	0.277*	-0.016
	(0.085)	(0.092)	(0.118)	(0.091)
Respected	0.127	0.05	0.047	-0.098
	(0.081)	(0.088)	(0.115)	(0.084)
Hours	0.115	-0.024	0.079	0.113
	(0.080)	(0.083)	(0.112)	(0.078)
Initiative	0.108	0.126	0.205+	0.065
	(0.086)	(0.092)	(0.124)	(0.092)
Achievement	-0.143+	0.148	-0.106	-0.063
	(0.084)	(0.093)	(0.119)	(0.089)
Responsibility	0.01	-0.015	0.051	0.005
	(0.083)	(0.091)	(0.121)	(0.089)
Interaction with colleagues	-0.019	-0.071	0.013	0.198*
	(0.096)	(0.089)	(0.148)	(0.089)
Promotion	-0.078	-0.077	-0.088	0.035
	(0.088)	(0.093)	(0.123)	(0.091)
Interested in Politics				
Very Interested	-0.160	-0.318*	-0.359+	-0.064
	(0.102)	(0.110)	(0.188)	(0.179)
Somewhat interested	-0.451*	-0.366*	-0.210	0.115
	(0.115)	(0.120)	(0.195)	(0.116)
Not very interested	-0.506*	-0.442*	-0.392+	0.162
	(0.147)	(0.160)	(0.215)	(0.109)
Confidence in Unions				
A great deal	1.132*	-0.18	-0.099	-0.606*
	(0.192)	(0.187)	(0.244)	(0.188)
Quite a lot	0.882*	-0.523*	-0.747*	-0.977*
	(0.135)	(0.180)	(0.247)	(0.185)
Not very much	0.482*	-0.920*	-1.139*	-1.259*
	(0.132)	(0.190)	(0.302)	(0.190)
Lambda	-0.777*	-0.954*	-0.019	-0.635*
	(0.251)	(0.332)	(0.299)	(0.316)

Notes: Standard errors in parentheses;* significant at the 5% level; + significant at the 10% level. Reference categories: Not at all interested in politics, not confidence at all in unions. All regressions include country and time dummy variables