Analyzing Job Mobility with Job Turnover Intentions:
An International Comparative Study

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A considerable amount of research on labor turnover and job search behavior exists in economics (for example, Belzil 1996; Farber 1994; Lillien and Hall 1986; Parsons 1991; Schettkat 1996; Veum 1997). This is not surprising since labor turnover and job search behavior are essential ingredients in an imperfect world where employers' and employees' characteristics are not known to all: only well-directed mobility can assure that anything resembling an optimal allocation of jobs to workers arises. A topic strongly related to job mobility is "turnover intentions." Turnover intention reflects the (subjective) probability that an individual will change his or her job within a certain time period. As opposed to labor turnover, turnover intentions are not definite. And, although turnover intentions are often associated with job search behavior, this need not always be the case.[1]

So why is the analysis of turnover intentions important? First, it should be noted that a vast literature on the analysis of turnover intentions exists in psychology (e.g., Cohn 2000; George and Jones 1996; Hom et al. 1992; Mobley 1977; Sager et al. 1998; Wright and Cropanzano 1998). Psychologists argue that voluntary labor turnover is an important topic since such movements represent potential costs to organizations in terms of loss of valuable human resources and the disruption of ongoing activities (Cascio 1991). Economists generally accept this point although they often tend to stress

the benefits of labor turnover. For psychologists, turnover intentions are accordingly important, since such intentions are the immediate precursors to actual turnover. As is well and extensively documented in the psychology literature, a close relationship between the intention to quit and actual turnover exists (e.g., Mobley 1977; Mobley et al. 1979; Price and Mueller 1986; Rusbult and Farrell 1983; Steers and Mowday 1981). Thus, these intentions are good at forecasting actual quits (e.g., Mobley et al. 1979; Sager et al. 1998; Steel and Ovalle 1984).[2]

There is also a second important reason for analyzing turnover intentions: to our knowledge, very few international comparative studies on actual turnovers exist. This is not surprising since there are severe data limitations in such cross-national studies. The main reason is that information on job fluctuations, when analyzed with microdata, usually require a panel, and cross-national panels are very rare. Quoting Simon Burgess, "Ideally, we would want to examine individual level surveys for a wide variety of countries, conducted on exactly the same basis and including the same rich set of conditioning variables. Sadly but unsurprisingly, this is not possible" (1999). These data limitations can be avoided by analyzing job turnover intentions.[3] Since turnover intentions and actual (primarily voluntary) turnovers are strongly correlated, such an approach presents an interesting alternative for analyzing job mobility in an international, comparative way.

Four cross-national studies on actual turnovers which we are aware of are those of J. van Ours (1990), R. Schettkat (1997), and S. Burgess (1994, 1999). Van Ours used aggregate pooled cross-sectional time-series data from various sources in order to analyze job mobility in six OECD countries (France, Japan, the Netherlands, Sweden, United Kingdom, and United States). He showed that job mobility is positively correlated with the growth of employment and negatively correlated with the unemployment rate. Furthermore, the results appear to indicate that no structural differences in job mobility between the USA, Sweden, France, and the UK exist, whereas job mobility in the Netherlands and Japan is structurally lower than in the other countries. Schettkat used aggregate data from the European Union's Labor Force Survey, with which he analyzed job mobility in the years 1982–83 and 1987–88 in twelve EU countries. The main aim of this study is to capture the effects of labor market regulations on labor mobility. He concluded that "there are clear indications of the impact of national regulations on employment stability, but at the same time variations in stability are observed which can hardly be explained by changes in labor market regulations" (117). He also showed that industrial structure and the macroeconomic situation influence job mobility. Burgess (1999) used aggregate data from different national surveys on elapsed job tenure in ten countries (France, Germany, Holland, Italy, Japan, Poland, Spain, Sweden, United Kingdom, and United States). These data are used to characterize the nature of labor reallocation and to try to isolate the effect of country-specific factors. Emphasis is placed on the role of employment protection legislation (EPL) and the trainability of the workforce. He found that both of these have a significant role to play in affecting the reallocation of labor. Burgess (1994) used aggregate data (disaggregated by industry) on

employment from the OECD International Sectoral Database for ten countries (Belgium, Denmark, France, Germany, Great Britain, Holland, Italy, Japan, and Sweden). The main aim of this paper is to analyze the relationship between the tightness of employment protection legislation (EPL) and job mobility. The results provide some support for the idea of a link between EPL and the speed of labor reallocation.

All these studies have data limitations in the sense that only a limited number of countries are considered and/or different national data sets are used, tending to make comparisons difficult and only possible at an aggregate level. Samples sizes are also usually very small. Furthermore, and if at all, very few control variables are included.

The aim of this study is to analyze turnover intentions in a cross-national setting based on a single survey. With the aid of an interesting data set covering twenty-five countries, we believe we are able to make two contributions to the existing literature on job mobility: first, and as was mentioned above, although a few studies on cross-national research on actual turnovers exist, they all face data limitations. Our data set, besides covering numerous countries, includes a rich set of control variables, not only with regard to demographic and job-related characteristics but also with regard to job perceptions. Especially perceptions such as job security and job satisfaction are seldom considered in empirical mobility studies, despite their obvious and accepted importance. Second, we are unaware of such a detailed cross-national analysis of turnover intentions, neither in the economics nor in the psychology literature.[4] We believe that such a comprehensive analysis of turnover intentions is not only interesting in its own right but it is most probably the only feasible way for obtaining rich, comparable, and microdata-based information on job mobility from a single survey covering so many countries.

The Determinants of Turnover Intentions

Economists have little to say about the direct determinants of turnover intentions since this topic usually falls into the realm of psychology. Since, however, actual turnovers follow directly from turnover intentions, economic theory on labor flows should also tell us something on turnover intentions. Based on numerous theoretical perspectives (e.g., human-capital theory, search theory, matching theory, and labor market segmentation theory), economists have identified several determinants of job turnovers. It is beyond the scope of this paper to comprehensively discuss all possible determinants. Instead, we will focus on variables which will be incorporated in the subsequent empirical analysis. Most of these variables are usually encountered in labor-turnover studies or in psychological studies on turnover intentions.

Gender has been shown to influence actual turnovers (e.g., Blau and Kahn 1981; Royalty 1998). It is sometimes observed that, depending on the level of education, women are less likely to change jobs (see Royalty 1998). Furthermore, in some countries, women have higher levels of job satisfaction, which generally reduces job-change

inclinations (see Sousa-Poza and Sousa-Poza 2000a). Booth and Francesconi (1999) found no large differences in job-to-job mobility between genders. Booth et al. (1999) showed, however, that, for older cohorts, job-quitting behavior is more pronounced for men, while leaving a job for other reasons is more common for women.

Age has been shown to be negatively correlated with the probability of changing a job (e.g., Campbell 1997; Kidd 1991, 1994). The main argument for this observation is that the available time to amortizise the costs associated with a job change diminishes with age, thus making a job change less attractive (see also Shapiro and Sandell 1985).

Marriage could have a negative effect on the probability of changing a job, since it is usually more costly if a family (as opposed to an individual) has to move (see Holmlund 1984). Furthermore, due to the traditional gender roles, married and employed women are more likely to be less mobile than corresponding men. The empirical evidence is, however, not very robust (see, for example, Sicherman 1990; Zimmermann 1998).

It is sometimes assumed that the level of education has a positive effect on the probability of changing jobs since a high education is often associated with better labor-market alternatives (e.g., Royalty 1998). Most studies, however, do not reveal a significant correlation (e.g., Booth and Francesconi 1999; Campbell 1997).

Working time may influence job-to-job mobility in a positive manner since lower working hours (and especially part-time employment) could imply that a worker is less integrated in a firm (e.g., Garcia-Serrano 1998). It is, however, also conceivable that long working hours (often in the form of involuntary overtime) may also increase the desire to change one's job. Thus, a U-shaped relationship between working time and turnover intentions may well exist.

Considerable evidence on a negative correlation between union membership and job turnover exists (e.g., Booth and Francesconi 1999; Kidd 1994; Lucifora 1998). Unions provide their members with an institution which upgrades their workplace and thus increases the costs of a job change (see also Bender and Sloane 1999).

The determinant which has received the most attention in the literature is the wage rate. An inverse relationship between the wage rate and the probability of a job change is assumed (e.g., Hall and Lazear 1984; McLaughlin 1991). It is expected that the higher the actual wage rate is, the lower the probability will be of finding an employer offering a higher wage rate (see Galizzi and Lang 1998).

Other job and employer characteristics such as fringe benefits, flexible working schedules, promotion expectations, firm-specific training, and firm size have been shown to relate to turnover (e.g., Idson 1996; Winter-Ebmer and Zweimüller 1999; Zweimüller and Winter-Ebmer 2000).

The psychological literature on the determinants of turnover intentions is extremely vast and multifaceted (for an overview, see Cohn 2000; George and Jones 1996; Sager et al. 1998). As opposed to the economic models on actual turnover, psychologists primarily stress the significance of "subjective experience of work" (George and Jones 1996). In several psychological models of turnover (e.g., Hom et al. 1992; Mobley 1977), attitudes, and in particular job satisfaction and organizational commit-

ment (e.g., pride in one's firm; see Cohn 2000), are considered to be the main determinants of turnover intentions. A. Cohn (2000) analyzed the effect of different forms of organizational commitment—namely job involvement and occupational/career commitment, work involvement, and group commitment—on turnover intentions, absenteeism, and actual turnovers.[5] His empirical analysis reveals that strong correlations between these measures of occupational commitment and turnover intentions exist, especially with regard to career commitment. Furthermore, he showed that actual turnovers and absenteeism are most significantly influenced by career commitment. J. M. George and G. R. Jones (1996) analyzed the effect that job satisfaction, value attainment, and positive mood have on turnover intentions. *Value attainment* captures the extent to which a job helps a worker to attain life values, *attitudes* capture how one comes to evaluate the job, and *moods* capture how one feels when performing the job. They show that these three factors provide additional insights into the reasons why low levels of job satisfaction lead to turnover intentions for some workers but not for others. They also show that job satisfaction has the largest correlation with turnover intentions among these three factors (correlation equal to –0.36). Using a panel of social welfare workers, T. A. Wright and R. Cropanzano (1998) analyzed the extent to which *emotional exhaustion* (defined as a chronic state of physical and emotional depletion that results from excessive job demands) influences voluntary turnovers. They observed a strong correlation between emotional exhaustion and voluntary turnovers.

Data and Methodological Issues

We analyzed the data set on Work Orientations from the 1997 International Social Survey Program (ISSP). The ISSP is a continuing annual program of cross-national collaboration starting with the first survey in 1985. The data for the ISSP are collected by independent institutions in several countries. The topics change from year to year by agreement, with a view to replication approximately every five years. The ISSP's official data archive is the Zentralarchiv at the University of Cologne, Germany. The topic of the 1997 survey is "Work Orientations" and covers issues on general attitudes toward work and leisure, work organization, work content, collective interests, and second jobs. Furthermore, the data set also contains numerous economic and socio-demographic variables.

One of the attractive characteristics of this data set is that it provides information on several heterogeneous countries. More specifically, we used data on the following twenty-four countries: Bulgaria (BG), Canada (CDN), Cyprus (CY), Czech Republic (CZ), Denmark (DK), France (F), Germany (D), Great Britain (GB), Hungary (H), Israel (IL), Italy (I), Japan (J), Netherlands (NL), New Zealand (NZ), Norway (N), Philippines (RP), Poland (PL), Portugal (P), Russia (RUS), Slovenia (SLO), Spain (E), Sweden (S), Switzerland (CH), and the United States (USA). We analyze a representative sample of 18,359 full- and part-time workers.

In order to analyze turnover intentions in a multivariate, cross-national setting, we estimated ordered probit regressions. The dependent variable is based on the following question: "All in all, how likely is it that you will try to find a job with another firm or organization within the next 12 months?" The four possible responses were "very likely," "likely," "unlikely," and "very unlikely."

As was discussed above, there are several determinants of turnover intentions. We distinguished three categories of independent variables: demographic characteristics, job characteristics, and subjective characteristics. The following variables were included in these categories:

- Demographic characteristics: male, age, age squared, married, years schooling.
- Job characteristics: working time, working time squared, union membership, public sector employee, supervisory position, flexible working times, high income.[6] These are the usual determinants included in an analysis of actual turnovers.
- Subjective characteristics: job satisfaction, job security, advancement opportunities, labor-market opportunities, firm pride.[7] These are variables which are usually used in psychological analyses of turnover intentions. Job satisfaction is considered a job attitude. Job security, advancement opportunities, and labor-market opportunities are subjective opinions of one's job (or job market). Firm pride is a measure of an individual's organizational commitment. Needless to say, in comparison with the measures used in the psychology literature, these variables are relatively simplistic. Thus, for example, George and Jones (1996) used up to ten items measuring turnover intentions and Cohn (2000) three measures for organizational commitment. Obviously, our choice of variables is driven by data availability within the ISSP data set.

Bangladesh, New Zealand, and the United States are (in the regression analysis) excluded due to missing variables. Standard probit models are estimated for males and females separately. The regressions include twenty-one country dummy variables, the reference country being Switzerland. Schettkat (1997) argued that the effect of labor market regulations can be captured by such country dummy variables. This is only partially true: these dummy variables will capture all country differences not controlled for in the regression. Thus, the more parsimonious a specification is, the more likely that the country dummies will be significantly different. Furthermore, these country dummies are strongly affected by cultural (work) norms and not only regulations. In fact, our models have a rich set of control variables, including the several subjective variables mentioned above. To a certain extent, these subjective variables should be capturing regulatory differences among countries. Thus, employment protection legislation should also be captured by the variable "job security." In other words, our country dummy variables are most probably primarily capturing differences in culture. As will be shown below, significant country differences exist even after including our rich set of controls.

At this point it is worth stressing that knowing the reason for an actual or intentional turnover is important. More specifically, whether a turnover is voluntary (i.e., quit) or involuntary (i.e., dismissal) has a different impact on firms' adjustment strategies arising from changes in their environment (for a more detailed discussion see Schettkat 1994, 1996). Furthermore, the extent to which turnovers are voluntary or not depends largely on the labor market situation itself: quits are pro-cyclical, but dismissals are counter-cyclical (Booth et al. 1999; Burda and Wyplosz 1994; Burgess and Rees 1996; McLaughlin 1991). Unfortunately, the ISSP data set does not allow us to identify the reason for an intended turnover. In fact, this is a drawback which many studies on actual turnovers possess, and only few studies exist which analyze data on turnover motives (e.g., Booth and Francesconi 1999; Booth et al. 1999; Sousa-Poza 2004). This paper therefore analyzes total (intended) turnovers. Nevertheless, we will show below that, in our sample, turnover intentions are pro-cyclical, implying that, to a certain extent, these intentions appear to reflect voluntary changes.

Results

In table 1, the turnover intentions for the twenty-five countries in the ISSP data set are depicted. A ranking of countries according to the proportion of individuals that are "very likely" to change their jobs is presented in figure 1. Canada, with 17 percent of the workforce having a high intention of changing their jobs, is ranked first, followed by Russia (16.8 percent), the United States, and Great Britain (14.3 percent). France has the highest turnover intention among continental European countries (13.9 percent), which may appear somewhat surprising as France has relatively strict employment protection legislation. Schettkat (1997) also observed that actual turnovers in France are high. One possible explanation for this observation may be found in the French educational system, which concentrates on education in schools and may cause job shopping of labor market entrants. Low turnover intentions can be observed in Japan (1.8 percent), Spain (3 percent), and in most Eastern European countries. The fact that Japanese workers have a very low turnover intention is in accordance to the observation that actual turnovers in Japan are also low (van Ours 1990). This is usually attributed to the lifetime-employment and seniority-pay tradition in Japan (e.g., Deutschmann 1987; Kanemoto and MacLeod 1991; van Ours 1990), although institutional aspects most probably also play an important role (see Abe et al. 2002).[8] Japanese firms also offer more firm-specific training than U.S. firms and offer their workers much larger wage increases as employee tenure with the firm increases. The result is lower average separation rates (Ehrenberg and Smith 2000). Other observations, namely that the Netherlands has a below-average turnover-intention inclination and that the Anglo-Saxon countries an above-average inclination, relate well to the figures on actual turnover (van Ours 1990).[9] This underlines a main (and in psychology well-known) issue in this study, namely, that turnover intentions and actual turnovers are positively correlated and that

therefore turnover intentions can be used as a proxy for actual turnovers.[10] The high turnover intentions in Russia may seem somewhat surprising, at least when one compares it to the other Eastern European countries in our sample. E. F. Rosenbaum (2001), however, showed that Russia is, in a number of ways, different from other Eastern European countries. Interesting is the fact that, compared with their Polish, Czech, and Hungarian counterparts, Russians are much more likely to agree to the statement that quick and high earnings are more important than a secure job in the long run. Therefore cultural elements may explain such differences.

In table 2, the results of the ordered probit model for the male and female samples are presented. The marginal effects calculated at sample means are also depicted.[11] We note that turnover inclinations decrease with age and increase with the level of education. We also observe decreasing turnover intentions of married women. Flexible working time also increases the probability of a potential job change.[12] Union membership and public-sector employment lower turnover intentions. The same applies to high income in the male sample. The strongest influence on turnover intentions, however, arises from the three subjective variables "job satisfaction," "job security," and "firm pride," which reduce, and "labor market opportunities," which increase, turnover inclinations.

Figure 1. Ranking of Turnover Intentions across Twenty-five Countries
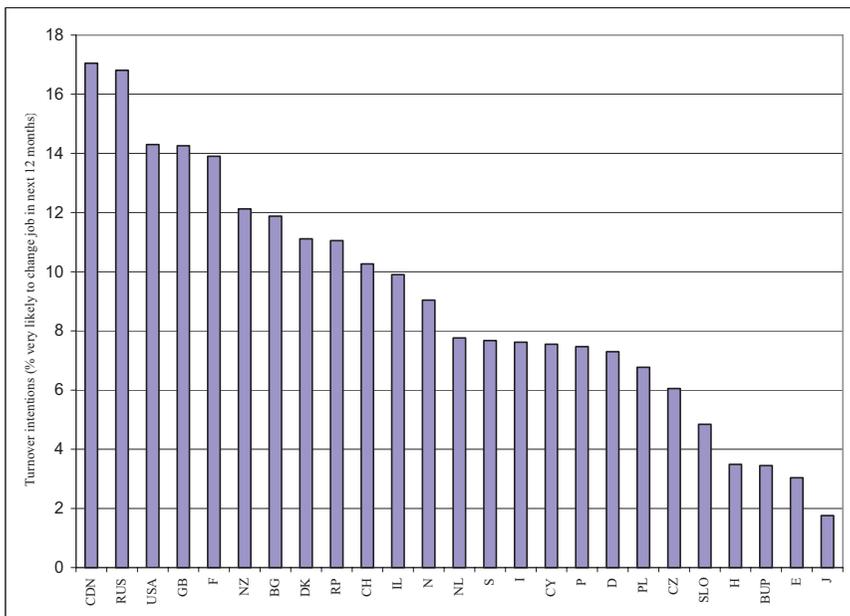
Table 1. Turnover Intentions in Twenty-Five Countries

Country	How Likely to Find a Job in the Next 12 Months?				Observations
	Very likely (%)	Likely (%)	Unlikely (%)	Very unlikely (%)	
Bangladesh (BUP)	3.4	12.6	20.9	63.1	406
Bulgaria (BG)	11.9	32.2	36.1	19.8	404
Canada (CDN)	17.0	13.6	25.4	43.9	610
Cyprus (CY)	7.5	17.5	22.5	52.5	583
Czech Republic (CZ)	6.0	13.0	32.9	48.0	529
Denmark (DK)	11.1	13.1	22.8	53.0	693
France (F)	13.9	27.2	28.4	30.5	489
Germany (D)	7.3	9.1	20.8	62.9	961
Great Britain (GB)	14.3	12.3	24.5	48.9	603
Hungary (H)	3.5	9.4	34.7	52.5	631
Israel (IL)	10.0	19.7	27.5	42.8	887
Italy (I)	7.6	10.9	21.7	59.8	433
Japan (J)	1.8	8.5	11.2	78.5	739
Netherlands (NL)	7.8	12.9	34.2	45.2	1147
New Zealand (NZ)	12.1	17.0	30.8	40.1	734
Norway (N)	9.0	14.5	30.9	45.6	1526
Philippines (RP)	11.0	32.4	20.3	36.3	543
Poland (PL)	6.8	20.3	35.3	37.6	502
Portugal (P)	7.5	12.6	24.5	55.4	884
Russia (RUS)	16.8	14.1	42.1	27.0	827
Slovenia (SLO)	4.8	7.8	17.4	70.0	516
Spain (E)	3.0	15.2	24.3	57.5	395
Sweden (S)	7.7	9.2	26.0	57.1	847
Switzerland (CH)	10.3	11.2	27.3	51.3	1666
United States (USA)	14.3	16.7	25.0	44.0	804
Total[a]	9.3	14.5	27.1	49.1	18359

[a] not weighted.

Table 2. Determinants of Turnover Intentions: Ordered Probit Models

	All		Males		Females	
	coef.	ME[b]	coef.	ME[b]	coef.	ME[b]
Demographic characteristics						
Male[a]	0.033	0.004				
Age	-0.043**	-0.005	-0.038**	-0.004	-0.045**	-0.002
Age^2 x 10^{-2}	0.021**	0.000	0.016*	0.000	-0.023**	0.001
Married[a]	-0.077**	-0.009	-0.057	-0.006	-0.103**	-0.021
Years schooling	0.020**	0.002	0.021**	0.002	0.019**	0.004
Job characteristics						
Working time	-0.005	-0.001	-0.008	-0.001	-0.005	-0.000
Working time^2 x 10^{-2}	0.008*	0.000	0.010*	0.000	0.008	0.000
Union member[a]	-0.176**	-0.020	-0.150**	-0.016	-0.213**	-0.020
Public sector employee[a]	-0.192**	-0.022	-0.211**	-0.023	-0.195**	-0.010
Supervisor[a]	0.013	0.002	-0.001	-0.000	0.031	0.002
Flexible working times[a]	0.009	0.001	0.118*	0.013	0.163*	0.000
High income[a]	-0.070*	-0.008	-0.100*	-0.011	-0.028	-0.001
Subjective characteristics						
Job satisfaction[a]	-0.489**	-0.055	-0.521**	-0.056	-0.452**	-0.039
Job security[a]	-0.443**	-0.050	-0.416**	-0.045	-0.477**	-0.040
Advancement opportunities[a]	-0.049	-0.006	-0.071	-0.008	-0.027	-0.010
Labor market opportunities[a]	0.096**	0.011	0.107**	0.011	0.090*	0.011
Firm pride[a]	-0.347**	-0.039	-0.303**	-0.033	-0.396**	-0.042
mu(1)	0.935**	0.943**				0.934**
mu(2)	1.694**	1.752**				1.646**
Number of observations	13079	6890				6189
Log likelihood	-14104	-7436				-6626
Pseudo R^2	0.120[c]	0.122[c]				0.122[c]

Note: The dependent variable can have four possible values ranging from zero ("very unlikely") to 3 ("very likely"). The regressions include twenty-one country dummy variables and a constant. Bangladesh, New Zealand, and the United States were excluded due to missing variables.

[a] Dummy variables.

[b] ME = marginal effect calculated at score = 3 (" very likely").

[c] McFadden's (1973) pseudo R2.

*/** Significant at the 5%/1% respectively.

In table 3, individual country regressions were conducted. Certain countries had to be excluded due to the lack of variation in the dependent variable (Spain, Japan) or due to missing variables (Bangladesh, New Zealand).[13] We note that a number of coefficients in several countries are not significant. This can be attributed primarily to the relatively small sample sizes in a number of countries. Nevertheless, by conducting such regressions for each country we try to identify "universal" determinants. Union membership, public-sector employment, job satisfaction, job security, and firm pride have the expected effect on turnover intentions in most countries. The negative (parabolic) effect of working time can be observed in Canada, Portugal, Sweden, and Cyprus.

In figure 2, we depict the country marginal effects before and after including control variables. The reference country is Switzerland. What we observe is that the control variables cannot explain most of the country differences. Only in Canada, Great Britain, and France can a substantial part or even the whole of the country differences be attributed to the control variables. It is interesting to note that our model explains little of the variation encountered in countries with relatively low turnover intentions. Since the estimated models are by no means parsimonious, these results indicate that cultural norms and institutional regulations most probably play a significant role in explaining job mobility, especially in countries such as Japan and the Eastern European countries encountered in our sample. This conclusion is important as it at least questions the

Figure 2. Country Marginal Effects
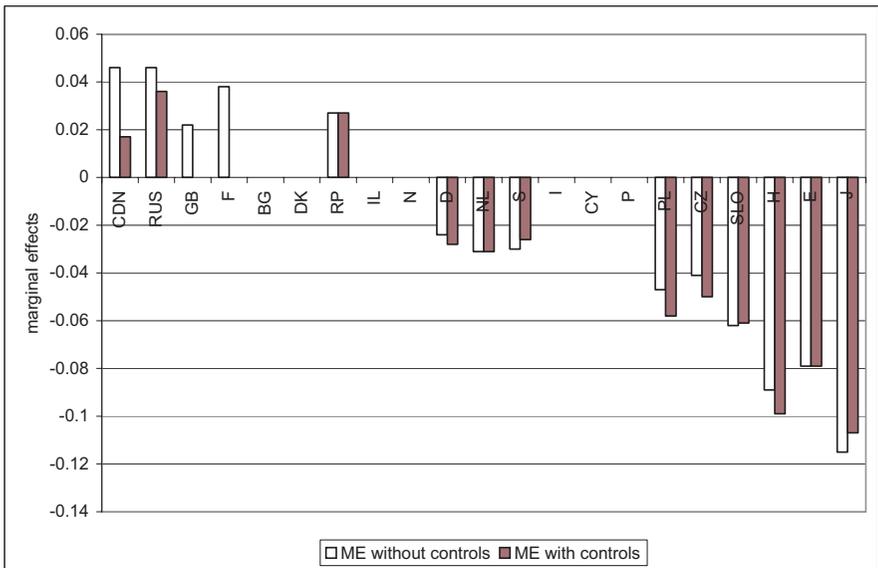
Note: Marginal effects are calculated with standard probit models using the same set of controls as in table 2. The dependent variable can have two possible values: 1 – if a job change is very likely in the next twelve months; otherwise, zero.

Table 3. Country Regressions

	DK	D	F	GB	I	IL	CDN	NL	N	RP	P	RUS	S	CH	SLO	CZ	USA	CY
Demographic characteristics																		
Male[a]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	0	0
Age	0	0	0	0	0	−	−	0	0	0	0	0	0	0	0	0	0	0
Age^2 x 10^{-2}	0	0	0	0	0	+	+	0	0	0	0	0	0	0	0	0	0	0
Married[a]	0	−	0	−	0	0	−	−	0	0	0	0	0	−	0	0	−	−
Years schooling	+	0	+	0	+	+	+	0	+	0	0	0	+	0	0	0	0	0
Job characteristics																		
Working time	0	0	0	0	0	0	−	0	−	0	−	0	−	0	0	0	−	−
Working time^2 x 10^{-2}	0	0	0	0	0	0	+	0	0	0	+	0	+	0	0	0	0	+
Union member[a]	0	−	0	−	0	−	0	0	−	−	0	0	0	0	0	−	−	−
Public sector employee[a]	0	−	−	0	0	−	0	−	0	−	−	−	−	−	0	0	0	0
Supervisor[a]	0	+	0	0	0	−	0	0	0	0	0	−	0	+	0	−	0	0
Flexible working times[a]	0	0	0	0	0	0	0	0	0	0	0	+	0	0	0	0	0	0
High income[a]	0	0	0	0	0	−	0	0	0	0	0	0	0	0	0	0	0	0
Subjective characteristics																		
Job satisfaction[a]	−	−	−	−	−	−	−	−	−	−	0	−	−	−	−	−	−	0
Job security[a]	−	−	−	−	−	−	−	−	−	−	−	0	−	−	−	−	−	−
Advancement opportunities[a]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labor market opportunities[a]	0	0	0	0	0	0	0	+	+	0	0	0	+	0	0	0	0	0
Firm pride[a]	−	−	−	−	0	−	−	−	−	0	−	−	−	−	−	−	−	−
Number of observations	577	797	594	443	316	709	417	1123	1308	254	647	634	658	1280	444	399	669	424
Pseudo R^2	0.14	0.11	0.12	0.14	0.14	0.11	0.13	0.12	0.11	0.09	0.15	0.08	0.13	0.13	0.12	0.09	0.09	0.16

Note: A value equal to zero implies that the corresponding coefficient is not significant at the 10 percent level. The results are based on ordered probit models.

extent to which economic variables are able to explain cross-national differences in mobility.

As we discussed above, the subjective variables contribute the most to the explained part of the variation. Thus, it is conceivable that the high turnover intentions in Canada, Great Britain, France, and possibly the United States are a result of differences in these subjective measures.

In table 4, we show the differences in these variables across all the twenty-five countries. Although not completely consistent, the results are interesting. Especially the high turnover intentions in Great Britain appear to arise from the relatively low ranking of job satisfaction (rank 18), job security (rank 22), advancement opportunities (rank 15), and firm pride (rank 18). Despite having precisely the same average turnover intention, the United States has remarkably different subjective measures: high job satisfaction, very high job security and firm pride, and very good advancement and labor market opportunities. If one accepts that these subjective measures are primarily driving turnover intentions and, thus, actual turnovers, then the underlying motives for labor reallocation in these two countries in the 1990s differ fundamentally. In Great Britain, turnovers appear to stem from poor working conditions and relatively low organizational commitment, whereas in the United States the high turnover levels could be ascribed to the favorable alternatives (although the corresponding coefficient for the country regression is not significant). It has been claimed that the increase in job mobility in Great Britain in the 1980s was at least partially a result of the decline in unions (Blanchflower and Freeman 1992; Schettkat 1997).

France, Russia, and, to a lesser extent, Canada, are comparable to Great Britain. In New Zealand, turnover intentions are high, which could be caused by the relatively low rankings of job security combined with good perceived labor-market opportunities.

In some Eastern European countries (Poland, Czech Republic, Hungary), where turnover intentions are low, we observe very low rankings of job satisfaction, job security, advancement opportunities, and firm pride. In Hungary, the lacking (perceived) labor-market opportunities could explain the low turnover intentions. In the other countries, however, perceived labor-market opportunities are not below average. It is therefore unclear why turnover intentions in Poland and the Czech Republic are so low.

Another country with a relative low turnover intention is Germany. Not only is its turnover intention low but it also has remarkably low rankings with regard to job satisfaction (rank 16), advancement opportunities (rank 16), labor market perspectives (rank 23), and firm pride (rank 21). These results do point to a certain disillusionment or resignation among German workers. In this context it is interesting to note that job satisfaction has been declining steadily in Germany in the past decade (see Sousa-Poza and Sousa-Poza 2000b; Jürges 2001). The reasons for this decline are largely unknown (see especially Jürges 2001).

The Japanese case is interesting. Here we observe a very low turnover intention, combined with surprisingly low rankings of job satisfaction and firm pride, and relatively poor advancement opportunities. In this setting, the very low perceived labor mar-

Table 4. Turnover Intentions and Subjective Measures in Twenty-Five Countries

Country	Turnover Intention		Job Satisfaction		Job Security		Advancement Opportunities		Labor Market Perspectives		Firm Pride	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
CDN	17.0	1	38.0	13	56.1	16	24.1	8	34.1	7	64.8	11
RUS	16.8	2	38.6	12	51.6	21	11.1	21	5.9	25	34.7	25
USA	14.3	3	47.8	8	69.2	4	30.0	4	59.0	1	73.6	3
GB	14.3	4	35.5	18	51.3	22	18.1	15	28.5	10	52.4	18
F	13.9	5	31.9	19	43.4	24	10.8	22	18.2	17	51.7	19
NZ	12.1	6	41.6	9	55.3	19	22.2	13	39.5	4	69.9	6
BG	11.9	7	27.0	23	40.1	25	15.6	18	16.6	18	38.0	24
DK	11.1	8	62.5	1	77.8	1	22.4	12	43.3	3	67.2	9
RP	11.0	9	59.6	3	72.9	2	57.6	1	39.1	5	74.5	2
CH	10.3	10	54.0	4	61.2	13	22.7	11	20.6	14	64.8	12
IL	10.0	11	49.4	6	67.9	5	31.6	3	31.0	8	70.3	4
N	9.0	12	37.4	14	69.6	3	14.2	19	45.5	2	63.4	13
NL	7.8	13	48.4	7	64.7	9	24.0	9	36.7	6	58.6	15
S	7.7	14	40.5	10	55.4	17	20.2	14	28.6	9	56.6	17
I	7.6	15	36.0	17	62.2	12	22.8	10	16.1	19	61.3	14
CY	7.5	16	60.2	2	56.3	15	29.8	5	21.1	13	69.3	8
P	7.5	17	38.8	11	62.9	11	25.8	7	13.8	22	83.7	1
D	7.3	18	36.5	16	63.6	10	16.8	16	12.3	23	50.4	21
PL	6.8	19	29.1	22	52.8	20	8.6	25	25.1	11	50.0	22
CZ	6.0	20	29.5	21	55.4	18	10.6	23	23.1	12	44.8	23
SLO	4.8	21	26.7	24	67.6	6	27.3	6	14.5	21	66.5	10
H	3.5	22	21.9	25	47.5	23	13.6	20	14.7	20	51.7	20
BUP	3.4	23	36.9	15	65.5	8	39.7	2	19.5	15	70.0	5
E	3.0	24	50.4	5	59.8	14	16.4	17	18.7	16	69.9	7
J	1.8	25	30.6	20	66.0	7	10.1	24	6.6	24	57.4	16

ket opportunities could (together with the relatively high job security levels) be causing the low turnover intentions. One interesting point to note is the observation in M. Abe et al.'s (2002) comparative analysis of job displacements between Canada and Japan that wage security is much higher in Japan than in Canada. More specifically, wage loss due to an employer change appears to be much larger for Canadian than Japanese workers. Furthermore, Abe et. al. also argued that voluntary separation rates in Japan are much higher than in Canada. These results are difficult to reconcile with our and other (e.g., van Ours 1990) evidence.

Summing up, one can conclude that, in a few countries, these subjective measures can explain some of the country differences. This is especially the case for Great Britain, France, and, to a lesser extent, Canada and Russia. One can only speculate on the reasons for the remaining country differences (i.e., on possible missing control variables). Especially in countries with relatively low turnover intentions, our control variables were not able to explain much of the observed differences. The poor income data in the ISSP data set could play a role. Institutional aspects such as employment protection legislation could also contribute to some of the differences.[14]

A Closer Look at Unemployment and Employment Protection Legislation

Unemployment has always played an important role in explaining job turnovers (e.g., Blau and Kahn 1981; Booth and Francesconi 1999; Booth et al. 1999; Campell 1997; Gerlach and Kühner 1974; van Ours 1990). Since job changers compete with unemployed individuals and since (from a search-theoretic viewpoint) searching for a job and moving to another employer is associated with costs and risks, risk-averse workers will reduce their inclination to change their jobs if unemployment is high. Thus, job-search theory postulates that an inverse relationship between actual turnovers and unemployment exists. In van Ours' cross-national analysis (1990), he showed that an increase of 1 percent in the unemployment rate results in a decrease in job-to-job mobility of 0.5 percent. One can expect that the inverse relationship between unemployment and actual turnover also applies to turnover intentions.

In order to take a closer look at the relationship between country unemployment and turnover intentions we include different country unemployment variables in our empirical model. We restrict this analysis to the fifteen OECD countries in our sample for which comparable unemployment figures are available. The results are depicted in table 5. In the first two columns, the regression results when including an explanatory variable for unemployment rates in the years 1996 and 1997, respectively, are depicted. The results are clearly insignificant, implying that the (actual or lagged) unemployment rate within a country cannot explain cross-national differences in turnover intentions. In column 3, the result of a regression which includes a variable for the change in unem-

Table 5. Marginal Effects of Country Unemployment Rates

|	(1)	(2)	(3)	(4)
Unemployment rate 1996	0.0004			
Unemployment rate 1995		0.0006		
Change in unemployment rate between 1992 and 1996			-0.056**	-0.044**

*/** Significant at the 5%/1% respectively.

ployment rates between 1996 and 1992 is shown. As can be seen, the coefficient is significantly negative.

A corresponding scatter plot is presented in figure 3. The fact that turnover intentions correlate with changes in the unemployment rate is not surprising since changes primarily influence perceptions. Furthermore, the negative relation between turnover intentions and changes in unemployment (i.e., turnover intentions are pro-cyclical) implies that, in this sample, turnover intentions are most probably largely voluntary. In the final column of table 5, the results of a model are shown that includes a variable for the change in unemployment rates and the other explanatory variables discussed above. It is interesting to note that, although the coefficient declines, it remains significantly negative despite controlling for job security and labor-market opportunities.

A further issue that has received some attention in the turnover literature is the role of employment protection legislation (EPL) (e.g., Burgess 1994, 1999; Lazear 1990; Schettkat 1997). Starting from E. P. Lazear, who has argued both theoretically and empirically that EPL substantially lowers employment, the subsequent literature found little evidence for significant negative impacts of EPL (see Addison and Teixeira 2001; Bentilola and Bertola 1990; OECD 1999; Pissarides 2001). Since EPL directly affects job security, one would nevertheless expect it to influence turnover intentions. We try to tackle this topic with measures for EPL developed by the OECD (see OECD 1999). These country measures were obtained from twenty-two indicators of EPL, which can be classified into three categories: "individual dismissals of workers with regular con-

Figure 3. Changes in Unemployment Rate and Turnover Intentions
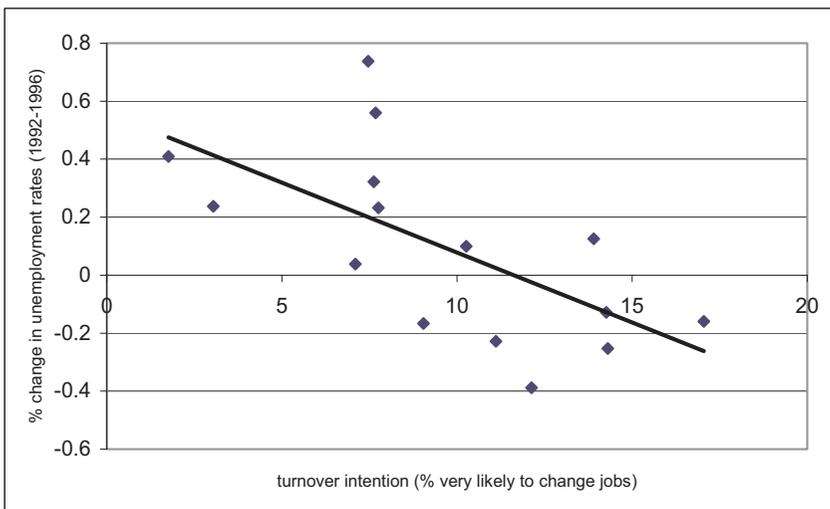
Note: Unemployment data were obtained from OECD Employment Outlook (1997).

Table 6. Turnover Intentions, Employment Protection Legislation (EPL), and Job Security

	Turnover Intentions		EPL		Job Security	
	%	Rank	Scale	Rank	%	Rank
CDN	17.0	1	0.9	16	56.1	11
GB	14.3	2	0.8	17	51.3	16
USA	14.3	3	0.2	18	69.2	3
F	13.9	4	2.3	10	43.4	18
NZ	12.1	5	1.7	13	55.3	14
DK	11.1	6	1.6	14	77.8	1
CH	10.3	7	1.2	15	61.2	9
N	9.0	8	2.4	9	69.6	2
NL	7.8	9	3.1	2	64.7	5
S	7.7	10	2.8	3	55.4	12
I	7.6	11	2.8	4	62.2	8
P	7.5	12	4.3	1	62.9	7
D	7.3	13	2.8	5	63.6	6
PL	6.8	14	2.2	11	52.8	15
CZ	6.0	15	2.8	6	55.4	13
H	3.5	16	2.1	12	47.5	17
E	3.0	17	2.6	8	59.8	10
J	1.8	18	2.7	7	66.0	4

Note: EPL data were obtained from OECD Employment Outlook (1999). The summary scores range from zero to 6, with higher values representing stricter regulation.

Table 7. Marginal Effects of Country EPL Variables

|	Without Control Variables	With Control Variables
EPL in late 1990s	−0.014**	−0.011**

*/** Significant at the 5%/1% respectively.

tracts," "temporary employment," and "collective dismissals." These measures are
presented in table 6.

All other things being equal, a high ranking of such an EPL measure should imply
higher levels of job security and, thus, lower turnover intentions. Our results clearly con-
firm this intuition.

In table 7, we show that EPL is significantly correlated with turnover intentions,
even when control variables are included. We also note that, especially in countries with
very unprotective EPL, turnover intentions are very high (see figure 4). This is most
notably the case for Canada, Great Britain, and the United States. This result is interest-
ing since it provides strong evidence that flows through employment are indeed signifi-
cantly affected by EPL. Although this conclusion is not surprising, the evidence of
recent empirical studies is not very robust (OECD 1999, 69; Garibaldi et al. 1997;
Alogoskoufis et al. 1995; Schettkat 1997).

It is sometimes argued that tight EPL hinders the reallocation of labor. In many
European countries, EPL was mainly passed in the 1970s and, according to Schettkat
(1997), labor turnover between the early 1970s and early 1980s showed a substantial
decline. This somewhat anecdotal evidence supports the "eurosclerosis" view that EPL
inhibits labor mobility. However, in the same time span, labor turnover also apparently
declined in countries with less strict EPL such as Great Britain and the United States

Figure 4. EPL and Turnover Intentions
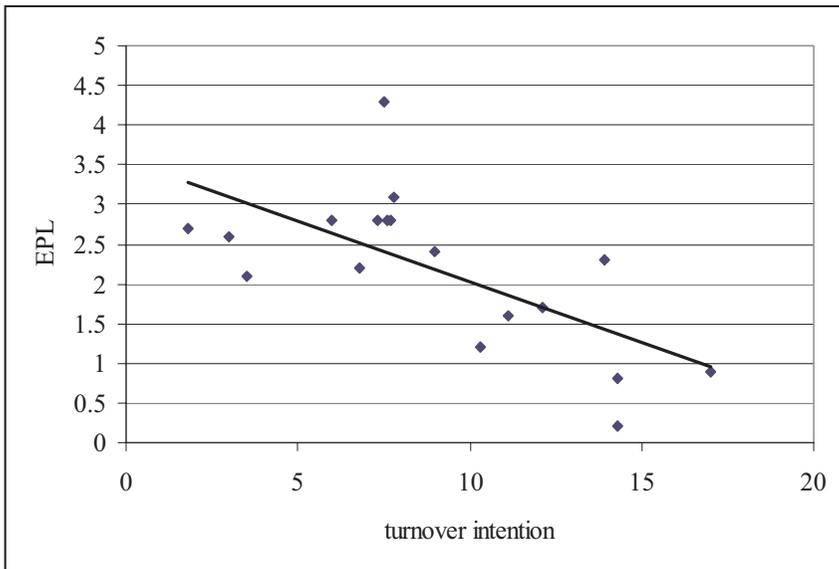
Note: Data on EPL were obtained from OECD Employment Outlook (1999).

(e.g., Burgess and Rees 1996; Gottschalk and Moffitt 1999). On the other hand, one could also argue that high employment stability improves economic performance if it assures high quality products and services, which may not be possible if job insecurity is high. Needless to say, disentangling any possible positive and negative effects of EPL on labor turnover is difficult and we are not aware of any studies which tackle this problem in an empirical way. Ultimately this issue is related to the optimal mobility rate within an economy—an issue which can hardly be analyzed empirically, for we know little about the numerous (direct and indirect) costs and benefits of turnovers (e.g., Burgess et al. 1996).

An interesting observation made by P. Garibaldi (1998) is that, despite highly regulated markets, job turnovers in European countries are similar to those in the United States. Although our results show that turnover intentions are larger in the United States than in European countries, the differences are not all that large (see figure 1). Garibaldi argued that this may be due to the fact that, in Europe, firms must give advanced notice before laying off employees. This is less the case in the United States. Higher advance notice increases the number of workers who search on the job, thus causing an increase in job turnover and less movements into unemployment.

Summary and Conclusions

This paper analyzes job-turnover intentions in twenty-five countries with data from the 1997 International Social Survey Program (ISSP). We are particularly interested in finding possible reasons for the observed diversity of turnover intentions among these countries. Our results show that high turnover intentions (measured as the proportion of employed individuals that report a very likely change of job in the next 12 months) can be observed in Canada (17.0 percent), the United States (14.3 percent), and Great Britain (14.3 percent). Low turnover intentions are encountered in Japan (1.8 percent), Spain (3.0 percent), and several Eastern European countries. The determinants of turnover intentions are, in a number of cases, the same as those observed in many studies on actual turnovers. Thus, we also obtained significant negative effects of age, marriage, union membership, public-sector employment, and high income and a positive effect for the level of education. Unsurprisingly, the main determinants of turnover intentions are subjective in nature. More specifically, job satisfaction, job security, perceived labor market opportunities, and pride in one's firm all play an important role in explaining turnover intentions.

Determinants of turnover intentions do vary substantially among countries. However, union membership, public-sector employment, job satisfaction, job security, and firm pride are significant in most countries. The high turnover intentions observed in Great Britain, France, and, to a lesser extent, Canada can be explained by the subjective measures considered in this study. Especially Great Britain and France have very low rankings of job satisfaction, job security, advancement opportunities, and firm pride.

Despite having the same turnover intentions, Great Britain and the United States differ substantially with regard to the subjective determinants. Whereas the high turnover intentions in Great Britain can be explained by the relatively poor perceived job satisfaction, job security, and firm pride, high turnover intentions in the United States coexist with relatively high levels of job satisfaction, job security, advancement opportunities, firm pride, and, most notably, good perceived labor market opportunities.

Changes in country unemployment rates correlate positively and significantly with turnover intentions. Thus, an increase in the unemployment rate leads to a significant reduction in turnover intentions. Strict employment protection legislation has a significant and negative effect on turnover intentions.

The analysis conducted in this study serves another important purpose: since job-turnover microdata (due to its panel nature) are nearly exclusively collected within one country, very few studies exist which analyze cross-national differences. Those studies either use aggregate-level data, several different national (and not always comparable) data sets, and/or proxies such as job tenure. None of these studies covers more than ten countries and, if at all, very few control variables are used. An analysis of job-turnover intentions is a very good proxy for actual turnovers. This conclusion is strongly supported by the extensive psychology literature on this topic. The ISSP data set thus offers a unique opportunity for analyzing job mobility in numerous countries. Since it is unlikely that accurate work-histories data will be collected (with a single survey) across so many countries, the analysis conducted in this paper is most probably the closest one can get at obtaining rich microdata-based and comparable information on job mobility in more than twenty countries. Nevertheless, our analysis is based on a cross-section, which makes the determination of causality difficult. Thus, further detailed cross-national surveys capturing turnover intentions should be promoted and conducted at regular intervals. Only a continual monitoring of subjective well-being at work in several countries can provide us with potential insights on the causes of future turnovers. This is especially the case when trying to analyze the influence of changes in institutions and legislation on mobility, which is a prerequisite for the establishment of appropriate policy measures.

What our analysis clearly shows is that, despite the rich set of controlling variables used in this study, large differences among countries remain. This is especially the case for countries with very low turnover intentions, namely Japan and several Eastern European countries. The fact that such large differences remain is a strong indication that customs and traditions must play a very important role in the determination of job-turnover intentions and, thus, of job mobility in general.

Notes

1.   The relationship between job search and actual turnover is analyzed in Hartog et al. 1988. See also Hartog and van Ophem 1996.

2.   R. P. Steel and N. K. Ovalle (1984) reexamined literature cited in previous reviews on the relationship between behavior intentions and employee turnover using meta-analysis procedures. They obtain a weighted average correlation of 0.5 between behavioral intentions and employee turnover. Interestingly, intentions were more predictive of attrition than overall job satisfaction, satisfaction with work itself, or, for that matter, organizational commitment. A. Cohn's (2000) analysis, which is based on a sample of 283 Israeli nurses, gives rise to a significant correlation between actual and intended turnovers equal to 0.16. J. K. Sager et al. (1998), depending on the item used, obtained significant correlations ranging from 0.06 to 0.28. This study analyzes a sample of 245 sales personnel. Fred Henneberger and Alfonso Sousa-Poza (2002a, 218) calculated a Spearman correlation coefficient of 0.26 based on a representative survey of Swiss employees.

3.   Another way of avoiding these data limitations is by conducting in-depth and comparative case studies for numerous countries. This has been recently done in Kuhn 2002, where a team of authors analyzed worker displacements in several countries.

4.   A comparison of turnover intentions in Japanese and British commercial and academic organizations is undertaken in Abrams et al. 1998.

5.   Cohn's (2000) analysis is based on a sample of 283 Israeli nurses, which may in part explain some of the relatively low correlations among organizational commitment forms and the outcome variables.

6.   The high income variable is a subjective variable, i.e., respondents were asked if they considered their income to be high or not. Unfortunately, our data set does not have any adequate wage data. Thus, we included this variable as an albeit poor proxy for an individual's income.

7.   These subjective variables are based on the following questions:

Job satisfaction: "How satisfied are you in your job?" Response possibilities: (1) completely satisfied, (2) very satisfied, (3) fairly satisfied, (4) neither satisfied nor dissatisfied, (5) fairly dissatisfied, (6) very dissatisfied, or (7) completely dissatisfied. The dummy variable used in the analysis is equal to one for the responses (1) and (2), otherwise zero.

Job security: "How much do you agree or disagree that this statement applies to your job? My job is secure." Response possibilities: (1) strongly agree, (2) agree, (3) neither agree nor disagree, (4) disagree, or (5) strongly disagree. The dummy variable used in the analysis is equal to one for the responses (1) and (2), otherwise zero.

Advancement opportunities: "How much do you agree or disagree that this statement applies to your job? My opportunities for advancement are high." Response possibilities: (1) strongly agree, (2) agree, (3) neither agree nor disagree, (4) disagree, or (5) strongly disagree. The dummy variable used in the analysis is equal to one for the responses (1) and (2), otherwise zero.

Labor market opportunities: "How easy or difficult do you think it would be for you to find an acceptable job?" Response possibilities: (1) very easy, (2) fairly easy, (3) neither easy nor difficult, (4) fairly difficult, or (5) very difficult. The dummy variable used in the analysis is equal to one for the responses (1) and (2), otherwise zero.

Firm pride: "To what extent do you agree or disagree with the following statement? I am proud to be working for my firm or organization." Response possibilities: (1) strongly agree, (2) agree, (3) neither agree or disagree, (4) disagree, or (5) strongly disagree. The dummy variable used in the analysis is equal to one for the responses (1) and (2), otherwise zero.

8.   In Abe et al. 2002 an interesting comparative analysis on worker displacements in Canada and Japan is undertaken. This analysis is particularly interesting in the context of this study as Canada and Japan differ substantially with regard to turnover intentions.

9.   We have also observed that, in the United States, a large proportion of underemployed workers exist. This could, in part, account for the high turnover intentions. See Sousa-Poza and Henneberger 2002.

10.   These results also correspond to the results in Burgess 1999. S. Burgess (1999) analyzed elapsed tenure in ten countries and showed that, overall, mean job tenure relative to the

United Kingdom is a lot higher in Italy and Japan, somewhat higher in France, Germany, Poland, Spain and Sweden, and lower in the United States. P. Kuhn (2002) argued that, in countries such as the United States, Canada, the United Kingdom, and Australia, the primary focus of legislation on displacement-related issues is a "palliative" one in the sense that their legislation is more reluctant to intervene in the displacement process itself than in European countries.

11. The marginal effects (calculated at the sample means) are defined as follows: , and where is the standard normal probability density function.

12. We have no ready explanation for this observation. In a study for Switzerland, we showed that working-time flexibility is an important determinant for actual turnover, although the effect is negative, i.e., reduces the probability of a job change (Henneberger and Sousa-Poza 2002b). J. Hunt (2000) also showed that, in Germany, the introduction of flexible hours of work in certain industries reduced fluctuation. We will show below that the positive effect observed here is primarily encountered in Russia (see table 3). Furthermore, based on the wording of the underlying ISSP question it is not possible to distinguish between employer-mandated nonstandard hours and employee-chosen flexitime. Needless to say, the prevalence of the former may well increase turnover intentions.

13. We included the United States, despite the fact that two of the explanatory variables were missing for this country.

14. Although, since we are controlling for job security, this should not have such a large impact.

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