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Self-Perceived Job Insecurity and Social Context: Are there Different European Cultures of Anxiety?

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688

Marcel Erlinghagen



DIW Berlin

German Institute
for Economic Research

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Are there Different European Cultures of Anxiety?**

Berlin, April 2007

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Self-Perceived Job Insecurity and Social Context

Are there Different European Cultures of Anxiety?

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Berlin, April 2007

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Abstract

Job insecurity causes far reaching negative outcomes. The fear of job loss damages the health of employees and reduces the productivity of firms. Thus, job insecurity should result in increasing social costs. Analyzing representative data from 17 European countries, this paper investigates self perceived job insecurity. Our multi level analysis reveals significant cross-country differences in individuals' perception of job insecurity. This finding is not only driven by social-structural or institutional differences, but job insecurity is also shown to be affected by cultural characteristics.

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Introduction*

Paid work is of fundamental importance in modern societies. For individuals, it serves not only to provide them with a means of subsistence but also plays an important structuring role in status attribution (Duncan 1961), since an individual's occupation is associated with the allocation of social prestige (Treiman 1977; Ganzeboom et al. 1992). Thus participation in paid work on a sustained basis is a fundamental determinant of an individual's social class position (Erikson and Goldthorpe 1992). From a life course perspective, individual actors are concerned to maintain or even raise their social status through their participation in paid work. It may be supposed, therefore, that individuals endeavour to remain in gainful employment continuously and to keep unavoidable career interruptions as short as possible. Whether and how far they succeed in so doing is reflected in their employment histories, which are characterised by periods of status stability as well as by processes of mobility leading to changes of status. However, such mobility processes are in principle associated with uncertainty, since their outcome is unknown. In the preliminary stages, therefore, it is unclear to the actor whether status maintenance following a change of employer, for example, can actually be guaranteed.

Uncertainty about the future course of an individual's career can take various forms and can be measured in various ways. The notion of 'job insecurity' is used in this paper to denote the case in which employees perceive the continuance of their jobs to be under threat. A distinction has to be made between this subjective job insecurity and objective indicators of insecurity, such as the level of layoffs and dismissals or the measurement of job tenure ('employment stability') (cf. for various definitions of the notion Valetta 1999; De Witte and Näswall 2003).

Self-perceived (subjective) job insecurity can in principle give rise to a number of negative consequences in various areas of social life. Physical and mental illnesses occur as the stress-related consequences of feelings of uncertainty (cf. Ashford, Lee, and Bobko 1989; Burchell 1994; Hellgren, Sverke, and Isaksson 1999; Ferrie 2001). Job insecurity can also be associ-

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ated with increased family problems (Larson, Wilson, and Beley 1994; Rook, Dooley, and Catalano 1999; Westman, Etzion, and Danon 2001; Mauno and Kinnunen 2002; Lim and Loo 2003). This not only has negative consequences for individuals themselves and their families but can also give rise ultimately to high costs for society as a whole. And finally, an excessively high level of societal uncertainty can also lead to a slump in consumer spending, with its well-known negative consequences for economic development (Wolter 1998; Benito 2006).

An insecure workforce may pose problems for firms as well, since insecurity may well cause employees to identify less with corporate objectives and may impact adversely on motivation and willingness to innovate and hence on productivity (Ashford et al. 1989; Brockner, Tyler, and Cooper-Schneider 1992; Hellgren et al. 1999; De Witte and Näswall 2003). Furthermore, a number of empirical investigations suggest that uncertainty increases employees' inclination to terminate their contracts (Ashford et al. 1989; Hellgren et al. 1999), with the link between job insecurity and resignations being determined decisively by the structure of opportunities outside the firm (Greenhalgh and Sutton 1991). Thus as self-perceived job insecurity increases, the most productive employees will be the first to quit because of their high employability (cf. Sutton 1983; Greenhalgh and Rosenblatt 1984) which, in addition to reduced motivation, can also jeopardise a company's productivity and competitiveness. At most, increasing job insecurity will spur the least productive employees to make greater efforts (Sverke and Hellgren 2001). However, in view of the empirically established negative health effects of high and persistent job insecurity, it is likely that, even among such groups, the higher output achieved as a result of the increased internal pressure will be only temporary (cf. Brockner 1990; Armstrong-Stassen 1994).

It is evident from this brief outline of the possible implications of job insecurity that a better understanding of the extent and, in particular, the causes of self-perceived job insecurity is of both academic and practical and political interest. It is scarcely surprising, therefore, that increasing numbers of researchers from various disciplines have turned their attention to this area in recent years. Despite the considerable theoretical and empirical progress achieved in the recent past, however, the question of international differences in job insecurity remains largely unexplored. Thus the research carried out to date has largely ignored the possible influence of factors in the social and economic context beyond individual, familial or workplace determinants. The present paper focuses on precisely this aspect by comparing job inse-

curity in 17 European countries. Of particular interest in this regard is the extent to which individual perceptions of job insecurity differ from country to country, how these supposed differences might be explained and what role factors in the wider societal environment might play.

To this end, the paper begins with an outline of some theoretical considerations concerning the link between individual resource endowments, higher-level contextual factors and cultural determinants (part 1). In part 2, the current state of research is surveyed. This leads to the identification of certain unresolved issues, which are to be investigated in the course of the analysis. In part 3, we draw on the European Social Survey (ESS) as a database for our investigations and explain the methodology used. In part 4, the findings of our analysis are presented in detail before being summarised and evaluated in part 5.

1 Theoretical considerations

Self-perceived job insecurity is the result of an evaluation process in which both higher-level contextual factors at the macro level (e.g. legislation, standards, economic environment etc.) and the actors' individual resource endowments (education, income etc.) at the micro level have to be taken into account (Coleman 1986). Thus self-perceived job insecurity is the result of an individual assessment by an actor embedded in a number of different environments.

If we start at the micro level, individual resources, which have a positive or negative influence on individuals' marketability, should influence their perception of their own job insecurity to a considerable degree. The relatively bad employment situation (cf. OECD 2002) of older people and unskilled workers (cf. Nickel and Bell 1995) should mean that job insecurity among these groups is also greater. Also to be expected are gender effects arising out of still existing role differences, gender-based specialisation (Becker 1965; Gronau 1977) and the associated (statistical) discrimination against women (Phelps 1972; Sattinger 1998). Previous negative employment experiences, such as spells of unemployment, should also serve to heighten job insecurity, since earlier career interruptions, particularly periods of unemployment, make labour market re-entry on a permanent basis more difficult (Heckman and Borjas 1980; Gershuny and Hannan 1999).

Family situation must be taken into account as a further factor in determining self-perceived job insecurity; because of different role expectations and different specialisations, a clear link can be expected with the characteristic 'gender'. Regardless of the actual distribution of roles, however, job insecurity can be expected to vary as the significance of an individual's income for the family's livelihood increases. Furthermore, because of their responsibility for children, parents in particular are likely to react more sensitively to a threat to their employment situation than those without children. Finally, it is reasonable to suppose that a precarious household financial situation heightens perceived job insecurity, since the potential loss of a job becomes a threat to the family's very livelihood.

Furthermore, the characteristics of the firm play an important role. In segmented labour markets, long-term attachment to the same employer indicates membership of the primary segment of the labour market, with its internal career paths (Doeringer and Piore 1971). Membership of the secondary segment of the labour market is characterised in particular by short job

tenures and frequent mobility processes outside the firm, whether it be changes of firm, transitions into unemployment or even withdrawal from the labour market. Against this background, it is reasonable to assume that there is a link between job tenure and self-perceived job insecurity. However, it is unclear without further investigation exactly what interaction there is between the two.

On the one hand, it might reasonably be assumed that, in segmented labour markets, self-perceived job insecurity should be negatively correlated with length of job tenure. The longer individuals remain with the same employer, the safer they should be from dismissal, whether because investments in company-specific human capital are protecting them (Mincer 1962; Becker 1964), because implicit contracts and trust developed over time exist (Rosen 1985) or because there might be special legal regulations protecting employees with many years' tenure (OECD 2005: 93-114).

On the other hand, however, it is also conceivable that employees who have changed employer frequently and therefore have shorter job tenures do not necessarily feel any more insecure as a result. It may be that their extensive experience in the external labour market has led them to perceive frequent changes of job as a normal situation that simply has to be managed rather than a threat. Conversely, anxiety about job loss may increase with length of job tenure, since departure from the company could give rise to high costs. These costs might include the loss of company-specific human capital or of entitlement to pay increases that have actually been approved (in the form of seniority pay, for example). Moreover, private investments could also be increasingly threatened by a process of mobility that is both feared and has an uncertain outcome. However, since long-term private investments (house purchase, importance of social networks based on neighbours or friends etc.) increase with length of job tenure, this could also be another reason why self-perceived job insecurity might increase with length of service (c.f. Belot and Ermisch 2006; Hughes and McCormick 1987).

Taking both arguments together, the distribution of job insecurity linked to length of job tenure is likely to be U-shaped. Thus employees with very short and with very long job tenures would probably experience a relatively high level of job insecurity.

In addition to a general job tenure effect, size of firm and sector or industry effects should also be reckoned on. Thus employees in large firms are likely to experience less job insecurity simply because of the greater importance of internal labour markets. Furthermore, small firms do not have such great powers of resistance in periods of economic difficulty as larger firms

(Idson 1989), particularly since small firms naturally include a higher share of start-ups that are at particularly high risk of failure in the first few years of trading (Jovanovic 1982). Such considerations suggest that subjective job insecurity declines with size of firm. In addition, there are industries that are subject to strong seasonal influences (e.g. construction, tourism and agriculture) and there are industries that are in decline because of structural change. It can reasonably be assumed that employees in both these areas will experience greater job insecurity.

At the macro level, finally, the level of labour market regulation and the scope of the state social protection system must influence self-perceived job insecurity. A high level of dismissal protection and good financial support, particularly for the unemployed, must tend to reduce fear of job loss. Furthermore, the economic situation in general and the situation in the labour market in particular can be expected to influence individuals' perception of job insecurity.

Over and above such 'hard' factors, it can be assumed that cultural factors also influence individuals' subjective assessments of their own employment situation. In examining this aspect, we cannot use a single definition of 'culture' as used by social scientists, which can or must vary depending on the epistemological interest of the enquiry in question. Thus as far as the notion of culture used in the rest of this article is concerned, it is sufficient to adopt a very general, rough definition, in which culture is perceived as 'shared cognitions, values, norms and expressive symbols' (DiMaggio 1994: 27). We understand culture as 'a 'tool kit' of symbols, stories, rituals and world-views, which people may use in varying configurations to solve different kinds of problems' (Swidler 1986: 273). In this regard, Hofstede and McCrae (2004: 58) speak of culture as 'collective programming of the mind', noting further 'that culture is (a) a collective, not individual, attribute; (b) not directly visible but manifested in behaviours; and (c) common to some but not all people'. Thus culture structures individuals' action strategies. '[S]trategies are the larger ways of trying to organise a life [...] within which particular choices make sense, and for which particular, culturally shaped skills and habits (what Bourdieu calls 'habitus') are useful' (Swidler 1986: 276). Thus culture alters the apparently 'objective' influences of available resources, of the conditions in private households and workplace and of institutions and is, therefore, crucial to any interpretation of an action situation.

Different cultures can develop their structuring power at very different levels of society (peer group, workplace, class etc.). The present article is concerned with cultural differences at the societal level. In other words, we are searching for indications that make it appear plausible not only that individuals' subjective perception of their own job insecurity is determined by their own resource endowment, their family and work environment and socio-economic context factors but also that their interpretation of their employment situation as more or less (in)secure is also shaped by culturally specific traits.

There is a long established tradition of research into the question of whether culturally specific traits of different societies and/or their members can be identified, how they are characterised and how they develop. Over the years, a number of general indicators have been developed in order to characterise corresponding cultural differences (cf. for a survey Hofstede and McCrae 2004). Psychologists in particular have attempted to establish links between the extent and causes of the perception of feeling, on the one hand, and cultural differences, on the other. True, there seems to be no consensus about the extent to which primordial human fears (such as the fear of heights, for example) are altered by cultural influences. However, there is clearly agreement about the existence of cultural differences in the case of learned fears and anxieties (cf. for example Scherer and Wallbott 1994; Higgins 2004). To that extent, it can be assumed that culturally specific differences may develop with regard to the causes and distribution of feelings of uncertainty about the continuance of an employment relationship.

It is clear of course that cultural characteristics do not necessarily have to coincide with the borders of European nation states. Nevertheless, by virtue of roots that reach back into the late Middle Ages, the constitutive power of nation states is likely to have exerted considerable influence over the cultural peculiarities of their populations, for example through the specific forms taken by the institutions of their education and welfare systems. Thus if individuals' perceptions of their own employment situation are influenced not only by individual, workplace and household factors but also by cultural factors, then fundamental differences between countries in the subjective perception of job insecurity are to be expected. In this respect, there should be stronger similarities between countries with similar cultural roots than between countries with different cultural traditions.

2 The current state of research

Influences at the micro level

Recent studies do not find any gender-specific effect with regard to self-perceived job insecurity (OECD 1997; Green et al. 2001). The findings on the influence of age, on the other hand, are ambiguous. Thus the OECD (1997) in its study observed a decline in job insecurity with increasing age; Näswall and De Witte (2003), on the other hand, found the converse correlation, while Green et al. (2001) were unable to detect any influence of age. There is a negative correlation between qualification and job insecurity (OECD 1997; Näswall and De Witte 2003; Maurin and Postel-Vinay 2005; for divergent findings see Green et al. 2001). Furthermore, manual workers report greater job insecurity than white-collar workers (OECD 1997; Näswall and De Witte 2003). Previous experience of unemployment also increases job insecurity, although this correlation weakens the further in the past the episode of unemployment is (Green et al. 2001; Green 2003). Finally, as far as the influence of job tenure is concerned, Green, Felstead, and Burchell (2000) find a U-shaped correlation in the shape of relatively high job insecurity among employees with very short and very long job tenure.

Findings on the influence of family and partners vary. Compared to fathers, the mothers of younger children experience considerably reduced job insecurity (Green et al. 2000). Mauno and Kinnunen (2002), using Finnish data, find increased insecurity among (married) women compared to their partners. The authors also show that self-perceived job insecurity increases if the household economic situation is difficult.

Green et al. (2000) show that employees in large firms are significantly more positive than their counterparts in small firms in assessing their future employment opportunities after a potential job loss. Public service employees experience the least insecurity (cf. Mauno and Kinnunen 2002), but no general difference can be observed between manufacturing industry and the service sector (OECD 1997; cf. also Green et al. 2001, however, who were unable to demonstrate any industry or sector effect). As is to be expected, workers on fixed-term contracts report greater job insecurity than those on permanent contracts (Green et al. 2001; Maurin and Postel-Vinay 2005). The same applies to temporary agency workers (Näswall and De Witte 2003). Green et al. (2000) also show that low-earning part-time workers report increased job insecurity.

Influences at the macro level

There have been only very few studies to date that have attempted to carry out a differentiated country comparison of subjective job insecurity. Thus the OECD study (1997: 132) compares job insecurity in 21 countries in 1996. A very wide range of variation is revealed, with the highest levels being recorded for Japan, the UK, France and the USA. At the bottom of the scale are countries such as the Netherlands, Australia, Austria and Norway. Green et al. (2000: 23), using data from the International Social Survey Programmes (ISSP), identify Bulgaria, France, Russia and the UK as the countries with the highest levels of job insecurity and Denmark, Norway, the USA and the Netherlands as the countries with the lowest levels.

Beside this country comparison the OECD's international comparative analysis (1997) shows, at an aggregated level, no statistically verifiable correlation between the level of dismissal protection and self-perceived job insecurity. And the same study finds no connection, at the aggregated country level, between the extent of temporary employment and the level of job insecurity. However, with regard at least to the expected correlation between the economic situation and subjective job insecurity, Green et al. (2000) and Green (2003) are able to demonstrate a significant positive correlation, in some cases a very clear one, between the regional unemployment rate and individual perceptions of job insecurity.

To the best of my knowledge, there have to date been no international comparative analyses that have investigated possible cultural differences as a cause of the differences that can be observed between countries with regard to self-perceived job insecurity.

Unresolved questions

Even though some progress in our theoretical and empirical knowledge has clearly been made as a result of the now not inconsiderable number of studies that have been carried out into the individual, workplace and familial factors contributing to job insecurity, a number of fundamental questions remain as yet unresolved and it is the aim of the present paper to help to answer them:

- How great is the variation in individuals' perceptions of job insecurity from country to country?
- Can clear links be established at the macro level between the economic and institutional environment and aggregated job insecurity in a society?
- To what extent can supposed national difference in individual perceptions of security be attributed to differences in the composition of national populations?
- Even when the influence of individual resource endowment and of the workplace and family context and the influence of institutional and economic differences are taken into account, do significant differences between countries remain that could be regarded as indicators of different insecurity cultures?

3 Methods

Data

The following analyses are based on data from Round 2 (Release 2) of the European Social Survey (ESS). The ESS is funded jointly by the European Commission, the European Science Foundation (ESF) and national research funding bodies. Representative population surveys are carried out in the 24 participating countries; response rates of between 43.6 per cent (France) and 78.8 per cent (Greece) have been achieved (ESS 2006). Individuals were surveyed using a standardised questionnaire mainly between autumn 2004 and spring 2005. The raw data set contains information on 45,681 individuals.¹

For methodological reasons, the following analysis refers to only 17 of the 24 ESS countries, since it is only for these countries that comparable macro indicators (e.g. level of welfare expenditure) used in the analysis are available; these indicators from other sources are subsequently used to supplement the ESS data. The countries included in the present analysis are Austria, Belgium, the Czech Republic, Germany, Denmark, Spain, France, Finland, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Sweden and the UK.² The dataset used is further restricted to dependent employees aged between 20 and 67 at the time of the survey who answered the question about their subjective job insecurity. Self-employed and unemployed individuals and others not in gainful employment are not included. After these exclusions, a total of 13,207 observations remain in the dataset.

Variables

The following ESS question is used in order to measure job insecurity: ‘Using this card, please tell me how true each of the following statements is about your current job’. There follow seven statements, all of which concern various aspects of job quality. Respondents are requested, among other things, to express an opinion on the statement ‘My job is secure’. They

¹ The ESS data are made available for download by the Norwegian Science Data Services (NSD) at no cost (<http://ess.nsd.uib.no/>). Extensive documentation can be found on the ESS homepage (www.europeansocialsurvey.org).

² The original dataset also includes Switzerland, Estonia, Iceland, Luxembourg, Slovakia, Slovenia and Ukraine.

can choose one of four responses: (1) 'not at all true'; (2) 'a little true'; (3) 'quite true' and (4) 'very true'. For the purposes of our analysis, we assume that job insecurity exists when a respondent has selected the 'not at all true' option.

Indicators that have proved to be relevant from a theoretical or empirical perspective to the dependent variable 'job insecurity' are incorporated into the statistical model as explanatory variables. They include indicators representing individuals' resource endowment (age, gender, qualifications, state of health, job tenure and experience of unemployment) as well as variables reflecting the significant influence exerted by the workplace (form of employment contract, working time, industry and size of firm) and the private household (region of residence, financial and family situation).

In addition, variables representing respondents' individual attitudes with regard to (a) religiousness, (b) general assessment of job security and (c) basic trust in their fellow human beings were also included. Besides the availability of the relevant information in the ESS, theoretical considerations were decisive in the selection of these indicators. Thus it is to be expected that job insecurity among religious people is lessened by their faith. Furthermore, those people who value job security highly may well report greater feelings of insecurity precisely because of their heightened sensitivity in this regard. Finally, individuals who are fundamentally more trusting are also less likely to be anxious about losing their jobs. On the other hand, clear differences between cultures can be observed empirically in religiousness (cf. Inglehart 1997), in the need for security (cf. Hofstede 2001) and in trust (cf. Delhey and Newton 2005).

Furthermore, five country-specific macro indicators are used as explanatory, higher-level context variables. These are:

- aggregated average job tenure, calculated on the basis of the ESS data, as a measure of job stability in each country;
- the level of dismissal protection as a measure of the legal safeguarding of employment contracts. The EPL Index developed by the OECD (2004) is used here.
- the level of social security expenditure as a measure of the financial protection to be expected in the event of job loss. These data originate from EUROSTAT and are given in purchasing power standards (cf. EUROSTAT 2005).

- average rate of growth of GDP for the years 2002 to 2004 as a measure of the economic situation in each country; the average growth rate is also calculated on the basis of data provided by EUROSTAT.
- the long-term unemployment rate, which is provided by EUROSTAT in an internationally comparative form.

Analysis strategy

The analysis begins with some descriptive findings. Thus, first of all, the share of employees who regard their jobs as insecure is calculated for all 17 countries, in order to obtain a geographical pattern of job insecurity in Europe. The link between aggregated job insecurity and the selected macro indicators ‘job stability’, ‘dismissal protection’, ‘level of social security’, ‘economic growth’ and ‘long-term unemployment rate’ is then depicted in simple bivariate scatter diagrams.

This article’s main purpose is to explain differences in job insecurity between countries. On the one hand, it is possible that the different economic or legal conditions at the macro level are the cause of any possible differences. Beyond these higher-level factors, however, it is also conceivable that differences in social structures at the micro level give rise to differences. Thus the level of self-perceived job insecurity is likely to be higher in countries with a high share of temporary/fixed-term workers, for example. And beyond the question of the influence of such group composition effects and higher-level contextual factors, it would also be of interest to ascertain the extent to which individual characteristics within each national context might possibly affect subjective perceptions of job insecurity in different ways. One way of shedding light on these questions is to make use of procedures that come under the general heading of multilevel analysis (Bryk and Raudenbush 1992; DiPrete and Forristal 1994). Since in our case there is a dichotomised dependent variable (job insecurity: yes = 1, in the opposite case 0), in what follows hierarchical generalised linear models (Lee and Nelder 2001) will be estimated as multilevel logistic regressions (Snijders and Bosker 1999: 207ff; Guo and Zhao 2000). The calculations were performed using HLM6 software and were based on Laplace estimates (Raudenbush et al. 2004; Raudenbush, Yang, and Yosef 2000; Breslow 2003).

We proceed step by step, beginning with the estimation of an ‘empty’ model without explanatory variables in order to establish the general variance of national differences in job insecurity.

rity. There then follow three random intercept models, into which individual variables (Model 1), individual attitude characteristics (Model 2) and, finally, the macro indicators (Model 3) are incorporated as fixed effects. Three random slope models follow (Models 4 to 6), which in addition to the fixed effects of the previous models also incorporate selected individual characteristics as random effects, so that their influence can vary from country to country. The results of this multilevel analysis will show whether, even when we control for fundamental macro indicators, population composition and various individual attitudes, there is still a significant difference between the countries with regard to self-perceived job insecurity. Further, the random slope models also show, in the case of the individual characteristics that differ from country to country, whether there are significant differences between the countries with regard to the effect of these individual influences on the dependent variable.

Multilevel analyses do of course make it possible to identify country-specific differences in the various factors that influence the dependent variable. However, they do not show whether this variation arises because the various influences are acting in a different direction or with a different level of intensity. Furthermore, it is not possible to say whether there might be groups of countries that are comparable in terms of the extent and determinants of job insecurity. For this reason, the multilevel analyses are supplemented by simple binary logistic regressions, which are calculated for each country separately and provide additional information as to the quality of the country-specific differences.

4 Findings

Table 1 shows the share of the economically active population in each country that perceives the continuance of their employment relationship to be under threat. The highest level of uncertainty is observed in France, where more than one quarter of all employees complain of job insecurity. Similarly high values are observed in Greece, and employees in Poland, the Czech Republic and Germany also have above-average levels of job insecurity. These countries are followed by the Netherlands, Hungary, Portugal, Belgium, Spain, Sweden, Finland and the UK. Bringing up the rear are Denmark, Ireland, Norway and Austria, which is the European country whose workers are least affected by job insecurity, with only 9 per cent expressing anxiety about the future of their employment relationships. This ranking broadly echoes the results of earlier studies by the OECD (1997) and Green et al. (2000).

Table 1: Geographical distribution of self-perceived job insecurity

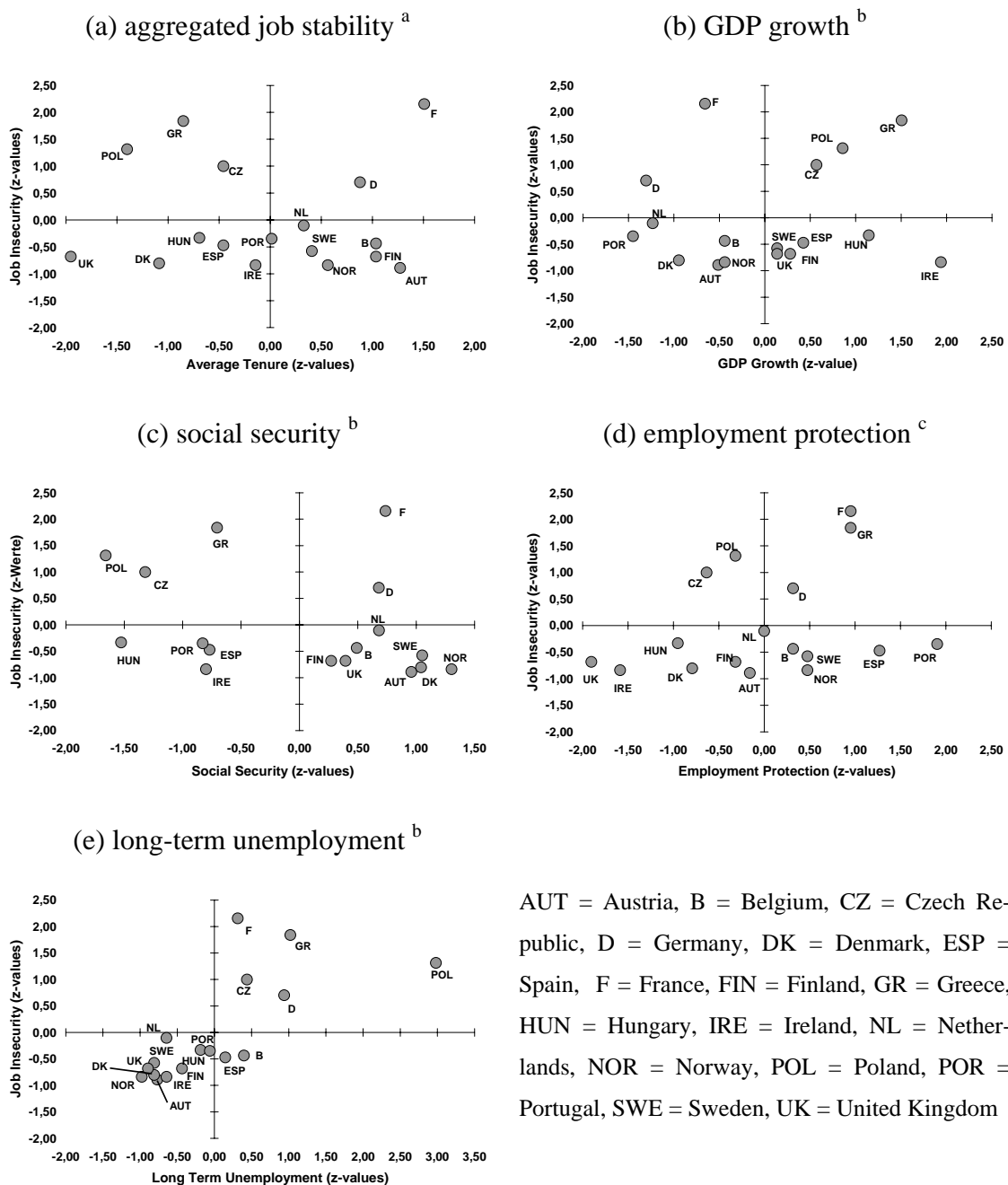
	share		share
France	26.3%	Belgium	11.5%
Greece	24.5%	Spain	11.3%
Poland	21.5%	Sweden	10.7%
Czech Republic	19.7%	Finland	10.1%
Germany	18.0%	United Kingdom	10.1%
Netherlands	13.4%	Denmark	9.4%
Hungary	12.1%	Ireland	9.2%
Portugal	12.0%	Norway	9.2%
		Austria	8.9%
mean	14.0%		
std. dev.	5.7		

source: ESS (weighted), author's calculations

Figure 1 shows five scatter diagrams depicting the connection between aggregated job insecurity and (a) aggregated employment stability, (b) economic growth, (c) the level of social protection, (d) the extent of dismissal protection and (e) the long-term unemployment rate for the individual countries. In order to ensure that the variables measured in different units (e.g. percentages and years) are presented in a comparable way, the actual values produced in the

analysis are transformed. This transformation is effected by calculating so-called z-values, which tell us how many standard deviations above or below the mean of each distribution each data value is. Since a coordinate plane runs through the zero point of both axes, the graph is divided into four quadrants. Thus countries with low employment stability and high insecurity, for example, are located in the upper left quadrant of the relevant diagram.

Figure 1: Correlation between aggregated job insecurity^a and other macro indicators



AUT = Austria, B = Belgium, CZ = Czech Republic, D = Germany, DK = Denmark, ESP = Spain, F = France, FIN = Finland, GR = Greece, HUN = Hungary, IRE = Ireland, NL = Netherlands, NOR = Norway, POL = Poland, POR = Portugal, SWE = Sweden, UK = United Kingdom

Data sources: ^aESS (weighted), author's calculations ^bEUROSTAT ^cOECD

Figure 1(a) shows that, contrary to our initial assumption, no unambiguous link can be observed between aggregated employment stability and job insecurity at the societal level. In Poland, Greece and the Czech Republic, high job insecurity is combined with low employment stability; in France and Germany, on the other hand, a high level of insecurity is combined with above-average stability. Similarly, there are countries that have a low level of job insecurity overall but have either a low (the UK, Denmark, Hungary, Spain and Ireland) or a high (Sweden, the Netherlands, Norway, Belgium, Finland and Austria) average level of job tenure. And again contrary to expectations, the general economic situation, expenditure on social protection and the level of dismissal protection do not have an unambiguous effect on aggregated job insecurity in the individual countries (Figure 1b to d). Only in the case of the long-term unemployment rate is there an unambiguous finding (Figure 1e), with overall job insecurity rising as the long-term unemployment rate increases. These findings make it clear that there is no simple correlation between societal and economic environments, on the one hand, and the extent of self-perceived job insecurity, on the other, which largely confirms the findings of earlier studies (OECD 1997; Green et al. 2000; Green 2003).

Let us turn now to the results of the multilevel analysis, which are presented in Table 2. The ‘empty’ model 0 shows significant variance in the intercept, i.e. the differences observed between the countries at the aggregate level are statistically significant. This does not change when the individual variables, the individual attitude characteristics and the macro indicators are successively incorporated into models 1 to 3 as explanatory variables. However, the variance of the intercept falls from 0.167, to 0.071 and 0.063 and then finally to 0.060. This means that population composition accounts for just under 58 per cent of the variation between countries ($1 - 0.071/0.167$). When the individual attitude characteristics and the macro indicators are also taken into account, the decrease amounts in total to about 62 and 64 per cent respectively.

Examination of the influence of the fixed effects on self-perceived job insecurity reveals that older workers over 40 years of age are more affected by job insecurity than younger workers. Furthermore, feelings of insecurity decline with increasing qualifications (measured in years of full-time education/training). Good health also reduces subjective job insecurity, as does increasing job tenure. The significant positive coefficient on job tenure squared, which is also taken into account, confirms the assumed U-shaped relationship between job tenure and uncertainty. And the fact of having already been unemployed once before increases the likely-

hood that an employee will report an insecure employment relationship. At the same time, however, this influence weakens the longer the time that has elapsed since the period of unemployment.

Table 2: Coefficients of the logistic multilevel analysis of job insecurity

	Model 0		Model 1		Model 2	
	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Intercept	a	0.1027	-1.197***	0.1921	-1.358***	0.1957
Macro Indicators						
Long-term unemployment rate						
Average GDP growth						
Social security spending						
Employment protection level						
Micro variables^a						
20-29 years old			-0.439***	0.0891	-0.457***	0.0893
30-39 years old			-0.118*	0.0686	-0.132*	0.0687
55-67 years old			-0.063	0.0940	-0.069	0.0941
Female			0.061	0.0615	0.059	0.0618
Years of full-time education			-0.020**	0.0086	-0.015*	0.0089
(very) good health status			-0.273***	0.0643	-0.243***	0.0647
Tenure (years)			-0.047***	0.0101	-0.046***	0.0101
Tenure (years ²)			0.001***	0.0003	0.001***	0.0003
Part-time employment			-0.186**	0.0817	-0.181**	0.0818
Fixed-term contract			1.193***	0.0721	1.198***	0.072
Unemployed during past 5 years			0.634***	0.0759	0.622***	0.0761
Unemployed but not during past 5 years			0.287***	0.0722	0.277***	0.0724
Agriculture, mining & steel			-0.228	0.1621	-0.247	0.1626
Construction industry			-0.356***	0.1214	-0.342***	0.1215
Infrastructure & transport services			-0.092	0.1076	-0.088	0.1077
Production related services			-0.188*	0.1685	-0.179	0.1135
Retail, finance, property services			-0.147	0.0897	-0.142	0.0899
Public services			-0.642***	0.1247	-0.642***	0.1249
Household related services			-0.552***	0.0850	-0.547***	0.0851
10-24 employees			-0.005	0.0797	0.003	0.0798
25-99 employees			-0.094	0.0783	-0.091	0.0784
100-499 employees			-0.065	0.0884	-0.063	0.0885
>= 500 employees			-0.086	0.1016	-0.096	0.1017
Small/medium town			0.002	0.0668	0.001	0.0669
Rural area			0.016	0.0683	0.018	0.0684
Contrib. to household income > 50 %			-0.114*	0.0589	-0.118**	0.0590
Poor financial situation			0.577***	0.0692	0.554***	0.0694
Child lives in household			-0.057	0.0589	-0.064	0.0590
Individual Attitudes^b						
Very religious					0.005	0.0651
Job security very important					0.018	0.0568
Low trust in others					0.341***	0.0618
Variance Components						
Intercept	0.167***		0.071***		0.063***	
Female						
Part-time employment						
Fixed-term contract						
Child lives in household						
Very religious						
Job security very important						
Low trust in others						

Continued on next page

Table 2 continued

	Model 3		Model 4		Model 5		Model 6	
	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.	Coef.	s.e.
Intercept	-1.925***	0.6114	-2.412***	0.4297	-1.991***	0.5068	-2.501***	0.4558
Macro indicators								
Long-term unemployment rate	0.090**	0.0373	0.092***	0.0234	0.083**	0.0300	0.096***	0.0254
Average GDP growth	-0.005	0.0652	0.052	0.0415	-0.006	0.0528	0.059	0.0450
Social security spending	0.000	0.0001	0.000**	0.0000	0.000*	0.0000	0.000***	0.000
Employment protection level	-0.023	0.1296	0.097	0.0839	-0.010	0.1060	0.078	0.0928
Micro Variables^a								
20-29 years old	-0.460***	0.0895	-0.503***	0.0900	-0.462***	0.0896	-0.504***	0.0904
30-39 years old	-0.130*	0.0688	-0.140**	0.0690	-0.129*	0.0689	-0.137**	0.0962
55-67 years old	-0.064	0.0942	-0.063	0.0946	-0.067	0.0943	-0.071	0.0948
Female	0.059	0.0619	0.062	0.0761	0.057	0.0620	0.056	0.0756
Years of full time education	-0.016*	0.0087	-0.021**	0.0088	-0.016*	0.0087	-0.021**	0.0088
(very) good health status	-0.243***	0.0648	-0.247***	0.0649	-0.242***	0.0648	-0.248***	0.0651
Tenure (years)	-0.047***	0.0101	-0.048***	0.0101	-0.047***	0.0101	-0.047***	0.0101
Tenure (years ²)	0.001***	0.0003	0.001***	0.0003	0.001**	0.0003	0.001***	0.0003
Part-time employment	-0.183**	0.0820	-0.154	0.0984	-0.174**	0.0820	-0.153	0.0972
Fixed-term contract	1.196***	0.0725	1.220***	0.1427	1.193***	0.0725	1.224***	0.1442
Unemployed during past 5 years	0.616***	0.0762	0.612***	0.0762	0.615***	0.0762	0.609***	0.0764
Unemployed but not during past 5 years	0.272***	0.0724	0.275***	0.0728	0.273***	0.0725	0.279***	0.0730
Agriculture, mining & steel	-0.235	0.1628	-0.265	0.1629	-0.242	0.1624	-0.268*	0.1627
Construction industry	-0.340***	0.1217	-0.345***	0.1220	-0.351***	0.1217	-0.364***	0.1223
Infrastructure & transport services	-0.081	0.1078	-0.089	0.1079	-0.093	0.1079	-0.104	0.1081
Production related services	-0.170	0.1338	-0.181	0.1137	-0.181	0.1137	-0.190*	0.1139
Retail, finance, property services	-0.135	0.0901	-0.139	0.0900	-0.138	0.0900	-0.144	0.0901
Public services	-0.632***	0.1251	-0.656***	0.1254	-0.647***	0.1251	-0.675***	0.1527
Household related services	-0.537***	0.0854	-0.558***	0.0853	-0.539***	0.0852	-0.564***	0.0855
10-24 employees	0.002	0.0799	0.009	0.0803	0.004	0.0801	0.010	0.0806
25-99 employees	-0.094	0.0786	-0.088	0.0787	-0.094	0.0787	-0.087	0.0790
100-499 employees	-0.064	0.0887	-0.040	0.0889	-0.059	0.0888	-0.033	0.0892
>= 500 employees	-0.098	0.1020	-0.094	0.1022	-0.096	0.1021	-0.090	0.1025
Small/medium town	0.002	0.0670	-0.005	0.0671	-0.003	0.0671	-0.013	0.0674
Rural area	0.019	0.0685	0.020	0.0683	0.004	0.0685	0.006	0.0686
Contrib. to household income > 50 %	-0.116**	0.0591	-0.126**	0.0595	-0.112*	0.0592	-0.126**	0.0596
Bad financial situation	0.551***	0.0697	0.545***	0.0698	0.557***	0.0698	0.550**	0.0699
Child lives in household	-0.065	0.0591	-0.080	0.0679	-0.069	0.0592	-0.081	0.0722
Individual Attitudes^b								
Very religious	-0.001	0.0654	-0.014	0.0652	-0.011	0.0864	-0.010	0.0862
Job security very important	0.015	0.0571	0.004	0.0568	-0.006	0.0816	-0.013	0.0821
Low trust in others	0.336***	0.0621	0.326***	0.0620	0.338***	0.0650	0.363***	0.0731
Variance Components								
Intercept	0.060***		0.100***		0.041***		0.118***	
Female			0.031*				0.029	
Part-time employment			0.049				0.044*	
Fixed-term contract			0.251***				0.257***	
Child lives in household			0.018				0.028	
Very religious					0.051**		0.050**	
Job security very important					0.054***		0.055***	
Low trust in others					0.006		0.024	

^a Reference categories are: 40-54 years old, male, (very) poor health status, employed full-time, permanent contract, no unemployment experience, manufacturing industry, 1-9 employees, urban area, contribution to household income <= 50 %, better financial situation, no child in household

^b Reference categories are: less/not religious, job security less important, higher trust in others

source: ESS (author's calculations) / significance: *** p < 0.01 ** p < 0.05 * p <= 0.1

Surprisingly, no gender-specific difference can be observed, even though we would have expected to find one because of continuing gender role differences and discrimination. This suggests that job insecurity is generated by mechanisms other than the usual affective reaction to other 'life crises', in which very distinct gender differences can sometimes be discerned (Fischer et al. 2004; Dohmen et al. 2005). However, the results might also conceal the fact that actual discrimination is not mediated directly by the 'gender' characteristic but rather makes itself felt indirectly. If women's role allocation means they have greater responsibility for housework and consequently have to interrupt their paid work more frequently, it follows that their average job tenure will be lower than that for men. Since job insecurity initially declines with increasing job tenure and since women's job tenure is shorter than that of their male counterparts but both characteristics are included in the model, this explains why no gender-specific effects could be observed in the multivariate analysis, even though in 'reality' women may feel more insecure than men.

Furthermore, the results make it clear that part-timers as a group are less likely to feel insecure than full-timers. This is surprising, since research findings from the USA and the UK in particular have shown in recent years that part-time employment is frequently associated with poorer working and employment conditions (Kalleberg, Reskin, and Hudson 2000; McGovern, Smeaton, and Hill 2004). However, it should be borne in mind that the conditions for part-time work clearly vary from country to country depending on the national institutional setting and that part-time work in Europe cannot be directly compared with part-time work in the UK and USA. (Blossfeld 1997). Moreover, objectively worse working and employment conditions do not necessarily mean that part-timers subjectively judge their work situation to be worse, since their expectations of their employment are completely different from those of full-timers (Conway and Briner 2002). Thus women's part-time work in particular has always to be judged in the context of role expectations and the household division of labour. We will return later in the article to the link between gender, employment form and insecurity from a comparative perspective in connection with the random effects observed. This notwithstanding, however, the fixed effects analysed here are initially consistent with findings that basically show greater job satisfaction among part-timers (Hakim 1997).

As is entirely to be expected, fixed-term employees report job insecurity significantly more frequently than workers on permanent contracts. There is also an industry effect. Employees

in 'public services' and 'household related services' are less likely to feel insecure than employees in manufacturing industry (reference category). Particularly surprising, at least at first sight, is the lower level of job insecurity in the construction industry. In view of the fact that this industry is significantly affected by both seasonal and cyclical factors, this finding also shows that objective job parameters do not necessarily have to tally with subjective evaluations of individual employment situations. The apparently surprising finding for the construction industry can be explained by the fact that construction workers are accustomed to their uncertain employment situation; furthermore, the construction industry in many countries has put in place its own particular welfare institutions that take account of conditions in the industry (cf. various contributions in Bosch and Philips 2003).

It is also worthy of note that no size of firm effect can be observed. This must be interpreted as a further indication that the objective employment situation does not necessarily have to coincide with subjective evaluations of that situation: clearly, their objectively less stable employment situation does not necessarily worry employees in smaller firms. Here too, it is conceivable that, over and above any possible industry effect, a 'habituation effect' also comes into play. A high share of employees in small firms have presumably always been employed in such firms, are very familiar with the working and employment conditions and regard them as 'normal', even though there are clear and objective differences between their situation and that in large companies. At the same time, this could also be an interesting pointer to discrepancies between the perceived and actual effect of the workplace representation of employees' interests, which is considerably better in larger establishments. Obviously, the existence of such interest representation may not necessarily reduce self-perceived insecurity, for whatever reason.

Whether an individual resides in a large city, a smaller town or a rural area has no statistically relevant influence on job insecurity. On the other hand, fear of job loss is significantly increased among individuals who classify their household financial situation as bad. This is scarcely surprising, since under these circumstances the consequences of possible unemployment will be more drastic, for example if there are debts that have to be repaid. However, parents with dependent children would have been expected to experience greater job insecurity, precisely because of the responsibility they have for their children. In fact, however, there is no difference between them and people without children. There is no plausible expla-

nation for this, nor for the finding that individuals who categorise themselves as the main earner in a household are less likely to report an insecure employment relationship.

Of the three individual attitude characteristics that are intended to represent basic character traits and for which the existence of a strong link with cultural conditioning and differences in socialisation might reasonably be assumed, neither religiousness nor the evaluation of job security as an important personal objective has any detectable influence on subjective job insecurity. On the other hand, job insecurity does seem to be a facet or symptom of a general lack of trust in other people.

Finally, turning to the influence of the four macro indicators contained in the model, the findings are similar to those for the bivariate aggregated approach presented in Figure 1. Neither economic growth nor the degree of dismissal protection in a society influences individual assessments of job insecurity. The connection between social security expenditure and self-perceived job insecurity, on the other hand, is more complex, as a look forward to the random effects model shows. The significant positive correlation between social security and job insecurity that exists in models 4 to 6, when the random effects are taken into account, points to a link between, on the one hand, the quality of the welfare state and the country-specific effects of employment contract type (part-time, fixed-term) and, on the other hand, personal attitudes, such as religiousness, and individual assessments of job insecurity. Regardless of this phenomenon, which requires further substantiation in future investigations, the results at least mean that a well developed welfare state obviously does not in itself reduce subjective insecurity.

Of all the macro indicators investigated, there is a clear significant positive correlation between the long-term unemployment rate and self-perceived job insecurity. This clear correlation points not only to the real significance of the labour market situation in individuals' assessment of their own employment situation but also to the immense psychological importance that the long-term unemployment rate obviously has for those in work as well. Regardless of the fact that many employees are at low risk of unemployment, and particularly of long-term unemployment, by virtue of their human and social capital endowments, this indicator nevertheless seems to function as a general 'bogey'. In comparison, neither the actual legal framework (operationalised here by the level of dismissal protection), nor the degree of protection against risk (operationalised here by social security expenditure) nor the evolution

of the economy (operationalised here by the increase in GDP) exert such a clear influence on subjective appraisals of individual employment situations.

In the random slope models 4 to 6, variation between the countries with regard to the effect of selected individual characteristics on job insecurity is possible. This approach has several objectives. Firstly, it is intended to shed more light on the complex relationship between national context, gender, household production and contractual situation, which is why the corresponding individual variables ('gender', 'child in the household', 'employed part-time' and 'on a fixed-term contract') were selected as random effects. Secondly, it is intended to test whether individual attitude characteristics vary significantly in their effect on the dependent variable. And finally, it is of interest to ascertain whether, despite the random effects being taken into account, there is nevertheless a significant variance between the intercepts. In other words, even controlling for basic influencing factors and taking account of different levels of analysis, are there significant differences between the countries with regard to subjective job insecurity?

The significant variance in models 4 and 6 among workers on fixed-term contracts indicates that a fixed-term employment contract influences perceived job insecurity to differing degrees in the various countries. On the other hand, there are no country-specific variations in parents' experience of job insecurity compared with that of people without children. In contrast, there are no stable findings concerning variations in the influence of gender and part-time work on job insecurity. In Model 4 there is at least a weakly positive gender-specific variation; this can no longer be observed in Model 6. Conversely, there is a country-specific variation in the influence of part-time work in Model 6, but this cannot be observed in Model 4. Turning now to the changes in the influence of the level of social protection already described above, they point to the existence of a complex relationship between gender, working time, individual attitudes and the welfare state, further investigation of which unfortunately lies outside the scope of the present article.

On the other hand, there are clear differences between the countries in the influence of religiousness and of the general assessment of job insecurity on the actual level of subjectively perceived job insecurity. Conversely, a lack of trust in other people tends to increase job insecurity in all countries in a similar way (no significant variation in the corresponding random effects).

However, the decisive finding with respect to our research question is that ultimately, despite differences in higher-level contextual factors and in individual attitudes and when selected random effects are taken into account in all the calculated models, there remains a significant variation in job insecurity between the countries.³ As has been demonstrated, the calculation of multilevel models offers deeper insight into the interaction of various influences at the micro and macro levels. Thus we now know, for example, that religiousness affects subjective insecurity in different ways in the various countries. However, nothing can be said about the nature of these differences. At the same time, significant differences between the countries have been shown to exist, although we have no information about whether, beyond these differences, groups of countries can be identified that have similar levels of job insecurity.

In order further to illustrate the results of the multilevel analysis, separate simple binary logistic regressions were calculated for each country. The individual variables and attitude characteristics listed in Table 2 function as explanatory variables here too. For reasons of space, however, Table 3 shows only the regression coefficients for the characteristics that were included in the multilevel model as random effects.

If we consider, for example, the influence of a fixed-term employment contract as shown in Table 3, this significantly increases subjective job insecurity in virtually all countries. This shows that the significant country-specific variation in this factor revealed in the multilevel model arises not because this characteristic is acting in different directions but rather because it is making itself felt with varying degrees of intensity. On the other hand, the variation in the influence of religiousness is attributable not only to the intensity of its action but also to the fact that it acts in different directions. This is not the place for a detailed description and interpretation of the individual coefficients, but the findings from the multilevel model combined with the individual country calculations do show that there is obviously not a single explanatory model for self-perceived job insecurity. Rather, the direction of action, the intensity of action and the combination of relevant influences differ from country to country.

³ The increase in the variance of the intercept between Model 3 and Models 4 and 6 suggests that the variance between the countries is negatively correlated with the variance in the selected individual variables (cf. Teachman and Crowder 2002: 290f; Snijders and Bosker 1999: 107 and 217). Thus, for example, the variance in the effect of fixed-term employment contracts between the countries in Models 1, 2, 3 and 5 obviously cause the overall variance between the countries to be underestimated.

Table 3: Selection of important regression coefficients of the individual country estimates (binary logistic regression)

	AUT	BE	CZ	D	DK	ESP
Female	-0.517*	-0.021	-0.181	-0.084	-0.102	0.005
Part-time employment	-0.306	0.198	0.423	-0.819***	-0.399	0.921**
Fixed-term contract	0.918**	1.800***	0.701***	1.967***	1.150***	2.423***
Child lives in household	0.225	0.355	-0.015	0.286	-0.158	-0.299
Very religious	0.341	-0.869**	0.229	-0.273	0.070	-0.241
Job security very important	-0.009	-0.301	0.449**	-0.321*	-0.605	-0.186
low trust in others	0.303	0.610**	0.061	0.479**	0.142	0.188
Pseudo R ²	0.144	0.202	0.102	0.168	0.202	0.351
n	802	689	1,050	1,028	677	672
	F	FIN	GR	HUN	IRE	NL
Female	0.266	0.617*	-0.204	0.002	0.176	0.062
Part-time employment	-0.529*	-0.022	-0.193	-0.115	0.186	0.193
Fixed-term contract	0.820**	3.164***	-0.109	0.952**	1.284***	0.580*
Child lives in household	0.026	-0.382	-0.126	-0.533	0.239	0.007
Very religious	-0.365	0.085	0.593**	-0.975**	-0.112	-0.306
Job security very important	-0.067	0.091	-0.391	0.504	-0.165	0.025
Low trust in others	0.483**	0.986**	0.158	0.378	0.406	0.546*
Pseudo R ²	0.135	0.260	0.245	0.143	0.179	0.106
n	777	861	568	517	809	741
	NOR	POL	POR	SWE	UK	
Female	0.120	0.442	-0.691**	0.192	0.032	
Part-time employment	0.013	-0.078	-0.143	-0.712*	-0.806**	
Fixed-term contract	1.467***	0.333	2.385***	2.266***	1.074***	
Child lives in household	-0.094	-0.004	0.356	-0.440	0.033	
Very religious	-0.037	0.309	0.229	0.073	-0.426	
Job security very important	0.122	0.537**	0.242	0.472*	-0.666**	
Low trust in others	-0.149	0.220	0.906***	0.617*	-0.053	
Pseudo R ²	0.109	0.196	0.281	0.244	0.132	
n	916	567	656	960	734	

Control variables are 'micro variables' and 'individual attitudes' from Table 2 / for reference categories see Table 2;

for country abbreviations see Figure 1.

source: ESS (author's calculations) / significance: *** p < 0.01 ** p < 0.05 * p <= 0.1

This still leaves the question of how far it is possible to identify groups of countries with similar levels of job insecurity and whether these groups have parallels with known regime

typologies. In order to investigate this question, 17 binary logistic regressions with the known control variables (including the macro indicators⁴) were calculated. The previous country estimates took account only of the population of each individual country; these new calculations, on the other hand, were carried out on the basis of the complete dataset. The only difference between the calculations is that each one includes an additional dichotomous country control variable. The purpose here was to ascertain whether job insecurity in Austria, Belgium, the Czech Republic etc. differs significantly from job insecurity in the 16 other countries. Thus if the differences between Austria and all other countries were to be calculated, a variable with the value '1' for all Austrian sample members and the value '0' for all other members was incorporated into the calculation. Table 4 shows the corresponding regression coefficients.

Table 4: Regression coefficients of the dichotomous country dummies

	Coef.		Coef.
Austria	-0.246***	Hungary	0.170
Belgium	-0.087	Ireland	-0.268
Czech Republic	0.621***	Netherlands	0.374***
Germany	0.370***	Norway	-0.048
Denmark	-0.187	Poland	-1.045***
Spain	-0.410**	Portugal	-0.675*
France	0.354	Sweden	0.076
Finland	-0.084	United Kingdom	-0.244
Greece	0.708***		

Control variables are 'macro indicators', 'micro variables' and 'individual attitudes' from Table 2 / for reference categories see Table 2;

source: ESS (author's calculations)

significance: *** $p < 0.01$ ** $p < 0.05$ * $p \leq 0.1$

Compared with the descriptive results shown in Table 2, the inclusion of individual variables and higher-level contextual factors partially changes the classification of the countries with high, average and low levels of job insecurity. Austria, Spain and Poland have a significantly reduced level of insecurity, whereas the Czech Republic, Germany, Greece and the Nether-

⁴ Using macro indicators as explanatory variables in regressions based on micro-level data means that the individual observations are not independent of each other. In order to counteract this problem, robust standard errors are used in the estimates relating to the 17 countries in our sample (cf. Moulton 1990).

lands have significantly raised values compared with the 16 other countries. Independently of this, however, no geographical pattern of insecurity that might be consistent with the established regime typologies can be identified here either.

5 Conclusions

Our analyses have made two things clear. Firstly, even when differences in social structure and higher-level contextual factors have been taken into account, there remain significant differences between a number of European societies in individuals' perception of employment insecurity. Secondly, over and above these differences, various combinations of factors also influence individuals' perceptions of their employment situation. These findings indicate that there are very different European cultures of anxiety when it comes to the possibility of job loss.

However, it should be borne in mind that the present article, in investigating the question of possible cultural influences on individuals' perception of job insecurity, has entered largely unexplored territory. By incorporating variables selected to represent religiousness, interpersonal trust and individuals' assessments of job insecurity, a first attempt has been launched to find concrete evidence of cultural determinants. It has met with limited success. This shows that it is difficult to find empirical evidence regarding the influence of higher-level cultural factors which, over and above institutional and cyclical parallelisms and independently of the distribution of individual characteristics within the individual societies, specifically affect the security of employment relationships. To that extent, it is the job of future research further to test, specify and modify the explanatory model that has been presented theoretically and applied empirically here. In particular, comparative longitudinal analyses are necessary in order to be able to establish clear causal relationships. Furthermore, such analyses could show whether the observed differences between the countries remain constant over time or whether, for example, increasing convergence or divergence can be observed with regard to self-perceived job insecurity. Such analyses would be expected to provide insight into the extent and direction of processes of cultural change.

Furthermore, in very general terms and irrespective of any possible cultural influences, the influence of possible habituation to objectively insecure employment conditions and the links between job insecurity, on the one hand, and the welfare state, the family and gender, on the other, seem to be interesting areas for future research that could make a considerable contribution to determining the causes of fear of job loss. Important information could be obtained here by taking account of three levels of analysis (society, household/workplace and individ-

ual). Furthermore, additional facets of job insecurity could be illuminated by adding further dimensions to the dependent variable. For example, individuals' assessments of their future employment prospects with another employer would be of interest here. Further insights could also be gained from analysis of employees' subjective assessments of their relative substitutability if they should leave their current employer (Schmidt 1999; Green et al. 2001; Näswall and de Witte 2003).

However, beyond these areas of research to be worked on in future, the analyses presented here have produced new information of value in comparative labour market research, since the differences between countries identified here are clearly not congruent with the established regime typologies that are strongly explanatory in the case of other research questions. Our analyses have not identified any typical regime clusters that could be linked up with different welfare state types (Esping-Andersen 1990; cf. also Ferrera 1998 and Deacon 2000), different production regimes (Hall and Soskice 2001) or different gender regimes (Lewis 1992; Sainsbury 1996). However valuable regime typologies might be for a multiplicity of current research questions, the limited scope of such explanatory approaches with regard to the findings presented here must be acknowledged. This is important for future research projects that might seek to provide not only a theoretical justification for an apparently self-evident allocation of individual societies to pre-formed regime clusters but also a thorough empirical test of that allocation.

At the same time, however, our analyses have implications for social and labour market policy. Hall and Gingerich (2004) have already pointed out the relevance of institutional complementarities, which should be taken into account by political decision-makers. Thus the design and functioning of social policy institutions can be judged only by reference to their specific social-historical environment. This is why attempts to reform social security systems, for example, by simply adapting isolated elements from foreign institutional arrangements promise little in the way of success. In view of the varying extent and heterogeneous determinants of self-perceived job insecurity, policymakers would be well advised to take account of each society's cultural specificities as well as of its institutional aspects if they wish to plan reforms successfully.

6 References

- Armstrong-Stassen, Marjorie. 1994. "Coping with Transition: A Study of Layoff Survivors." *Journal of Organizational Behavior* 15: 597-621.
- Ashford, Susan J., Cynthia Lee, and Philip Bobko. 1989. "Content, Causes, and Consequences of Job Insecurity: A Theory-Based Measure and Substantive Test." *Academy of Management Journal* 32: 803-829.
- Becker, Gary S. 1964. *Human Capital*. New York (et al.): Columbia University Press.
- Becker, Gary S. 1965. "A Theory of the Allocation of Time." *Economic Journal* 75: 493-517.
- Belot, Michèle, and John Ermisch. 2006. "Friendship Ties and Geographical Mobility. Evidence from the BHPS." ISER Working Paper 2006-33. Colchester: University of Essex.
- Benito, Andrew. 2006. "Does Job Insecurity Affect Household Consumption?" *Oxford Economic Papers* 58: 157-181.
- Blossfeld, Hans-Peter. 1997. "Women's Part Time Employment and the Family Cycle: A Cross-National Comparison." In *Between Equalization and Marginalization. Women Working Part-Time in Europe and the United States of America*, edited by H-P Blossfeld and C. Hakim. Oxford: Oxford University Press: 315-324.
- Bosch, Gerhard, and Peter Philips (eds.). 2003. *Building Chaos. An International Comparison of Deregulation in the Construction Industry*. London: Routledge.
- Breslow, Norm. 2003. "Whither PQL?" UW Biostatistics Working Paper No. 192. Washington: University of Washington.
- Brockner, Joel. 1990. "Scope of Justice in the Workplace: How Survivors React to Co-Workers Layoffs." *Journal of Social Issues* 46: 95-106.
- Brockner, Joel, Tom R. Tyler, and Rochelle Cooper-Schneider. 1992. "The Influence of Prior Commitment to an Institution on Reactions to Perceived Unfairness: The Higher They Are, the Harder They Fall." *Administrative Science Quarterly* 37: 241-261.
- Bryk, Anthony S., and Stephen W. Raudenbush. 1992. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Newbury Park: Sage.
- Burchell, Brendan. 1994. "The Effects of Labour Market Position, Job Insecurity, and Unemployment on Psychological Health." In *Social Change and the Experience of Unemployment*, edited by D. Gallie, C. Marsh, and C. Vogler. Oxford: Oxford University Press: 188-212.
- Coleman, James S. 1986. "Social Theory, Social Research, and a Theory of Action." *American Journal of Sociology* 91: 1309-1335.
- Conway, Neil, and Rob B. Briner. 2002. "Full-Time versus Part-Time Employees: Understanding the Links between Work Status, the Psychological Contract, and Attitudes." *Journal of Vocational Behaviour* 61: 279-301.
- De Witte, Hans, and Katharina Näswall. 2003. "‘Objective’ vs. ‘Subjective’ Job Insecurity: Consequences of Temporary Work for Job Satisfaction and Organizational Commitment in Four European Countries." *Economic and Industrial Democracy* 24: 149-188.
- Deacon, Bob. 2000. "Eastern European Welfare State: The Impact of the Politics of Globalization." *Journal of European Social Policy* 10: 146-161.
- Delhey, Jan, and Kenneth Newton. 2005. "Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism?" *European Sociological Review* 21: 311-327.

- DiMaggio, Paul. 1994. "Culture and Economy." In *The Handbook of Economic Sociology*, edited by N. J. Smelser, and R. Swedberg. Princeton/New York: Princeton University Press/Russel Sage Foundation: 27-57.
- DiPrete, Thomas A., and Jerry D. Forristal. 1994. "Multilevel Models: Methods and Substance." *Annual Review of Sociology* 20: 331-357.
- Doeringer, Peter B., and Michael J. Piore. 1971. *Internal Labour Markets and Manpower Analysis*. Lexington: Heath.
- Dohmen, Thomas, Armin Falk, David Huffman, Uwe Sunde, Jürgen Schupp, and Gert G. Wagner (2005). "Individual Risk Attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey." DIW Discussion Paper No. 511. Berlin: German Institute for Economic Research DIW.
- Duncan, Otis D. 1961. "A Socioeconomic Index for all Occupations." In *Occupations and Social Status*, edited by A. J. Reiss. New York: Free Press of Glencoe: 109-138.
- Erikson, Robert, and John H. Goldthorpe. 1992. *The Constant Flux. A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.
- Esping-Andersen, Gosta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- ESS. 2006. "ESS Round 2 Fieldwork Figures and Projections for Round 3." ESS Document (available at: www.europeansocialsurvey.org).
- EUROSTAT. 2005. "GDP per Capita in Purchasing Power Standards." *EUROSTAT News Release*, 20 December 2005.
- Ferrara, Maurizio. 1998. "The Four 'Social Europes': Between Universalism and Selectivism." In *The Future of European Welfare: A New Social Contract?*, edited by M. Rhodes, and Y. Mény. London: MacMillan: 79-96.
- Ferrie, Jane E. 2001. "Is Job Insecurity Harmful to Health?" *Journal of the Royal Society of Medicine* 94: 71-76.
- Fischer, Agneta H., Anthony S. R. Manstead, Patricia M. Rodriguez Mosquera, and Annelies E. M. van Vianen. 2004. "Gender and Culture Differences in Emotion." *Emotion* 4: 87-94.
- Ganzeboom, Harry B.G., Paul M. De Graaf, Donald J. Treiman, and Jan De Leeuw. 1992. "A Standard International Socio-Economic Index of Occupational Status." *Social Science Research* 21: 1-56.
- Gershuny, Jonathan, and Carmel Hannan. 1999. "Unemployment: Blame the Victim?" ILR Working papers No. 31. Institute for Labour Research: University of Essex.
- Green, Francis. 2003. "The Rise and Decline of Job Insecurity." Department of Economics Discussion Paper 05/03. Canterbury: University of Kent.
- Green, Francis, Alan Felstead, and Brendan Burchell. 2000. "Job Insecurity and the Difficulty of Regaining Employment: An Empirical Study of Unemployment Expectations." *Oxford Bulletin of Economics and Statistics* 62 (Special Issue): 855-883.
- Green, Francis, Andrew Dickerson, Alan Carruth, and David Campbell. 2001. "An Analysis of Subjective Views of Job Insecurity." Department of Economics Discussion Paper 01/08. Canterbury: University of Kent.
- Greenhalgh, Leonard, and Zehava Rosenblatt. 1984. "Job Insecurity: Toward Conceptual Clarity." *Academic of Management Review* 9: 438-448.

- Greenhalgh, Leonard, and Robert Sutton. 1991. "Organizational Effectiveness and Job Insecurity." In *Job Insecurity. Coping with Jobs at Risk*, edited by J. Hartley, D. Jacobson, B. Klandermans, and T. van Vuuren. London et al.: Sage: 149-171.
- Gronau, Reuben. 1977. "Leisure, Home Production, and Work - the Theory of the Allocation of Time Revisited." *Journal of Political Economy* 85: 1099-1123.
- Guo, Guang, and Hongxin Zhao. 2000. "Multilevel Modelling for Binary Data." *Annual Review of Sociology* 26: 441-462.
- Hakim, Catherine. 1997. "A Sociological Perspective on Part-Time Work." In *Between Equalization and Marginalization. Women Working Part-Time in Europe and the United States of America*, edited by H-P Blossfeld and C. Hakim. Oxford: Oxford University Press: 22-70.
- Hall Peter A., and Daniel W. Gingerich. 2004. "Varieties of Capitalism and Institutional Complementarities in the Macroeconomy. An Empirical Analysis." MPIfG Discussion Paper 04/5. Cologne: MPI for the Study of Societies.
- Hall, Peter A., and David Soskice. 2001. "An Introduction to Varieties of Capitalism." In: *Varieties of Capitalism – The Institutional Foundation of Comparative Advantage*, edited by P. A. Hall, and D. Soskice. Oxford: Oxford University Press: 1-68.
- Heckman, James J., and Georg J. Borjas. 1980. "Does Unemployment Cause Future Unemployment? Definitions, Questions and Answers from a Continuous Time Model of Heterogeneity and State Dependence." *Economica* 47 (New Series), Special Issue on Unemployment: 247-283.
- Hellgren, Johnny, Magnus Sverke, and Kerstin Isaksson. 1999. "A Two-Dimensional Approach to Job Insecurity: Consequences for Employee Attitudes and Well-Being." *European Journal of Work and Organizational Psychology* 8: 179-195.
- Higgins, Louise T. 2004. "Cultural Effects on the Expression of Some Fears by Chinese and British Female Students." *Journal of Genetic Psychology* 165: 37-49.
- Hofstede, Geert. 2001. *Culture's Consequences. Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. 2nd Edition. Thousand Oaks (et al.): Sage.
- Hofstede, Geert, and Robert R. McCrea. 2004. "Personality and Culture Revisited: Linking Traits and Dimensions of Culture." *Cross-Cultural Research* 38: 52-88.
- Hughes, Gordon A., and Barry McCormick. 1987. "Housing Markets, Unemployment and Labour Market Flexibility in the UK." *European Economic Review* 31, 615-645.
- Idson, Todd L. 1989. "Establishment Size Differentials in Internal Mobility." *Review of Economics and Statistics* 71: 721-724.
- Inglehart, Ronald .1997. *Modernization and Postmodernization. Cultural, Economic, and Political Change in 43 Societies*. Princeton: Princeton University Press.
- Jovanovic, Boyan. 1982. "Selection and the Evolution of Industry." *Econometrica* 50: 649-670.
- Kalleberg, Arne L., Barbara F. Reskin, and Ken Hudson. 2000. "Bad Jobs in America. Standard and Nonstandard Employment Relations and Job Quality in the United States." *American Sociological Review* 65: 256-278.
- Larson Jeffrey H., Strephan M. Wilson, and Rochelle Beley. 1994. "The Impact of Job Insecurity on Marital and Family Relationships." *Family Relations* 43: 138-143.
- Lee, Youngjo, and John A. Nelder. 2001. "Hierarchical Generalised Linear Models: A Synthesis of Generalised Linear Models, Random-Effect Models and Structured Dispersion." *Biometrika* 88: 987-1006.
- Lewis, Jane. 1992. "Gender and the Development of Welfare Regimes." *Journal of European Social Policy* 3: 159-173.

- Lim, Vivien K. G., and Geok Leng Loo. 2003. "Effects of Parental Job Insecurity and Parenting Behaviors on Youth's Self-Efficacy and Work Attitudes." *Journal of Vocational Behavior* 63: 86-98.
- Mauno, Saijo, and Ulla Kinnunen. 2002. "Perceived Job Insecurity Among Dual-Earner Couples: Do its Antecedents Vary According to Gender, Economic Sector and the Measure Used?" *Journal of Occupational and Organizational Psychology* 75: 295-314.
- Maurin, Eric, and Fabien Postel-Vinay. 2005. "The European Job Security Gap." *Work and Occupations* 32: 229-252.
- McGovern, Patrick, Deborah Smeaton, and Stephen Hill. 2004. "Bad Jobs in Britain. Nonstandard Employment and Job Quality." *Work & Occupations* 31: 225-249.
- Mincer, Jacob. 1962. "On-the-job Training: Costs, Returns, and some Implications." *Journal of Political Economy* 70 (supplement): 50-79.
- Moulton, Brent R. 1990. "An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables on Micro Units." *Review of Economics and Statistics* 72: 334-338.
- Näswall, Katharina, and Hans De Witte. 2003. "Who Feels Insecure in Europe? Predicting Job Insecurity from Background Variables." *Economic and Industrial Democracy* 24: 189-215.
- Nickell, Stephen, and Brian Bell. 1995. "The Collapse in Demand for the Unskilled and Unemployment Across the OECD." *Oxford Review of Economic Policy* 11: 40-62.
- OECD. 1997. "Is job Insecurity on the Increase in OECD Countries?" *OECD Employment Outlook 1997*. Paris: OECD: 129-160.
- OECD. 2002. "Increasing Employment: The Role of Later Retirement." *OECD Economic Outlook 72*, Paris: OECD: Chapter V.
- OECD. 2004. "Employment Protection Regulation and Labour Market Performance." *OECD Employment Outlook*. Paris: OECD, 61-125.
- OECD. 2005. *Ageing and Employment Policies – Germany*. Paris: OECD.
- Phelps, Edmund S. 1972. "The Statistical Theory of Racism and Sexism." *American Economic Review* 62: 659-661.
- Raudenbush, Stephen W., Anthony Bryk, Yuk Fai Cheong, Richard Congdon, and Mathilda du Toit. 2004. *HLM6: Hierarchical Linear and Nonlinear Modeling*. Lincolnwood: Scientific Software International.
- Raudenbush, Stephen W., Meng-Li Yang, and Matheos Yosef. 2000. "Maximum Likelihood for Generalized Linear Models with Nested Random Effects via High-Order Multivariate Laplace Approximation." *Journal of Computational and Graphical Statistics* 9: 141-157.
- Rook, Karen, David Dooley, and Ralph Catalano. 1999. "Stress Transmission: The Effects of Husband's Job Stressors on the Emotional health of their Wives." *Journal of Marriage and the Family* 53, 165-177.
- Rosen, Sherwin. 1985. "Implicit Contracts: A Survey." *Journal of Economic Literature* 23: 1144-1175.
- Sainsbury, Diane. 1996. *Gender, Equality, and Welfare States*. Cambridge: Cambridge University Press.
- Sattinger, Michael. 1998. "Statistical Discrimination with Employment Criteria." *International Economic Review* 39: 205-237.

- Scherer, Klaus R., and Harald G. Wallbott. 1994. "Evidence for Universality and Cultural Variation of Differential Emotion Response Pattern." *Journal of Personality and Social Psychology* 66: 310-328.
- Schmidt, Stefanie R. 1999. "Long-Run Trends in Workers' Belief about their Own Job Security: Evidence from the General Social Survey." *Journal of Labor Economics* 17 (Supl.): S127-S141.
- Snijders, Tom A. B., and Roel J. Bosker. 1999. *Multi Level Analysis. An Introduction to Basic and Advanced Multilevel Modeling*. London et al.: Sage.
- Sutton, Robert I. 1983. "Managing Organizational Death." *Human Resource Management* 22: 391-412.
- Sverke, Magnus, and Jonny Hellgren. 2001. "Exit, Voice and Loyalty Reactions to Job Insecurity in Sweden: Do Unionized and Non-Unionized Employees Differ?" *British Journal of Industrial Relations* 39: 167-182.
- Swidler, Ann. 1986. "Culture in Action: Symbols and Strategies." *American Sociological Review* 51: 273-286.
- Teachman, Jay, and Kyle Crowder. 2002. "Multilevel Models in Family Research: Some Conceptual and Methodological Issues." *Journal of Marriage and Family* 64: 280-294.
- Treiman, Donald J. 1977. *Occupational Prestige in Comparative Perspective*. New York: Academic Press.
- Valetta, Robert G. 1999: "Declining Job Security." *Journal of Labor Economics* 17 (Supl.): S170-S197.
- Westman, Mina, Dalia Etzion, and Esti Danon. 2001. "Job Insecurity and Crossover of Burnout in Married Couples." *Journal of Organizational Behavior* 22: 467-481.
- Wolter, Stefan C. 1998. "The Costs of Job-Insecurity – Results from Switzerland." *International Journal of Manpower* 19: 396-409.