Working conditions, HR policies and separation[1]

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Abstract (to complete)

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Introduction

In standard competitive labour market there is no particular incentive for job separations to occur, since employees could not improve their labour market position by switching to another firm from their current matches. In contrast to this conjecture there is a great number of micro-level evidence on the dynamics of labour market (Davis and Haltiwanger 1999, Farber 1999). Extensive analysis of turnover has been made in human resource management (HRM) and personnel psychology, where attention centers on the personnel policies and job attitudes of the employees. There is also, however, an increasing interest in labor economics to incorporate information on working conditions and worker attitudes into the analysis of turnover.

Previously, empirical studies have analyzed directly how individual characteristics and working conditions or job attributes affect employees' probability of quitting or their job duration. Adverse working conditions have been found to increase quits. In most of these studies the data on working conditions are not from individual employees' workplaces, but

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rely on, for example, industry injury rates or work attributes typical of different occupations (e.g. Viscusi 1979; Bartel 1982; Herzog and Schottman 1990; Gronberg and Reed 1994). Another strand of the literature explains quits or job durations directly by means of job satisfaction scores, the employee's characteristics, and firm characteristics, but without information on job attributes (e.g. Flanagan et al. 1974; Freeman 1978; Clark et al. 1998; Ward and Sloane 2000; Clark 2001; Kristensen and Westergaård-Nielsen 2004; Delfgaauw 2007; Lévy-Garboua et al. 2007). These studies discover that dissatisfied workers are more likely to quit their current matches. In other words, the self-assessed level of job satisfaction is a good predictor for job mobility beyond the effect of wages. Working the other way, Akerlof, Rose and Yellen (1988) show that job changes lead to an increase in job satisfaction and Altonji and Paxson (1988) present evidence that job mobility leads to more satisfactory working hours. However, in some studies workplace-specific attributes are used (Garcia Serrano 2004 and Bockermann and Illmakunnas 2006). The first study uses the Spanish Working Conditions Survey (SWCS) for 2001, which is a nationally representative random sample survey of all employed (having worked at least 1 hour in the week preceding the interview week) individuals aged 16 years and above. It contains worker individual characteristics and also firm characteristics or characteristics related to the job of the worker such as sector, industry, firm size, type of contract (temporary, permanent), occupation, firm tenure, provided by the worker at the interview. The dataset collects specific self-assessed workplace features such as psychosocial and physical environment characteristics, similar to the ones in the data we have (see the data description section below). Furthermore the workers are asked whether they consider leaving/think they will have to leave their current job within a year and if so for which reason (several alternatives are given). This information is used is used to construct an expected exit hazard that is the output variable in this study. The study's main focus is underlying the differences between the temporary vs. permanent employees.

The second paper (that uses individual specific working conditions data) analyses quit intentions and actual separations using Finnish data. Bockermann and Llmakunnas (2006) contributes to the literature by analyzing the interactions between adverse working conditions, job satisfaction, employees' intentions to quit and actual separations. A drawback of the data set is that it is a single cross-section. In the first reduced-form models, they explain alternative binary indicators of quit intentions and actual job switches by individual characteristics, firm characteristics, and measures for adverse working conditions. In the second, extended model, the interrelationships of the variables is examined in more detail. Finally, actual job switches obtained from the longitudinal employer-employee data are explained by quit intentions,

wage, and some other personal characteristics. This model forms a system of probit models. Reduced form models show that employees facing adverse working conditions are more likely to switch jobs more frequently. Multivariate probit models point out that job dissatisfaction that arises in adverse working conditions is related to job search and this in turn is related to actual job switches.

This paper deviates from the earlier ones in this field of research in some important aspects. First, the data used include detailed information on several different aspects of working conditions at the workplace, not just conditions typical of the occupation or industry, therefore it is possible to take advantage of this rich information on the prevalence of adverse working conditions as determinants of employees' quit intentions. Second, the data at hand have been matched to longitudinal, register-based employer-employee data maintained by Statistics Denmark, which allows the identification of actual job switches of the survey respondents for the whole period covering the different waves of the Danish Work Environment Cohort Study

There are several major advantages of a potential investigation on the Danish data compared to the studies undertaken by Garcia-Serrano (2004) and by Bockerman and Illmakunnas (2006). Firstly, the main shortcoming of the Spanish study is that the information on exit rates is only in expectations and there is no way to actually validate this with realized outcomes. We do not have such a problem. In our data the workers are asked for reasons of leaving the job-hence we can also distinguish between quits and layoffs- they held 5 years ago if this was not the current job and we have 3 rounds of interviews. We can match all workers to all firms for all intermediary years, hence we can look at job exit behaviours before the interview date and after the interview dates. Secondly, while Garcia-Serrano (2004) is forced to choose a rudimentary empirical analysis given the properties of his data, we can adapt and estimate a more complex framework that takes into account efficiency wage theory and wage compensating theory. Next, our data is more precise and more detailed than the one used by Garcia-Serrano and unlike Bockermann and Illmakunnas (2006) we are able to control for working conditions over time. Last, but not least, Denmark is indeed a very interesting country to study in terms of influences of non-pecuniary factors on job mobility, given the fact that wages are much more compressed than in other countries; thus, very high mobility but wage compression at the same time, as characteristics of the Danish labour market, simply invite research on the explanatory power of working conditions on the job mobility.

Tab1: Variable Description

Name	Description	Min	Max
female	1 if the worker is female, 0 otherwise	0	1
age	age of the worker	18	70
educyears	number of years of education	7	17
married 1	if worker is married, 0 otherwise	0	1
ten	tenure in years	1	37
wage	hourly wage	82	384
phy-harm	1 if the worker experiences at least one factor :noise, vibration or bad lighting , 0 otherwise	0	1
term-harm	1 if the worker experiences at least one factor :heat, high temperature, coldness, draugh and dry air, 0 otherwise	0	1
respir-hazard	1 if the worker experiences at least one factor: vapour haze and passive smoke, 0 otherwise	0	1
skinc-hazard	1 if the worker experiences at least one factor: lubricants and solvent contact, 0 otherwise	0	1
mat-harm	1 if the worker is exposed to mineral dust, 0 otherwise	0	1
ergonomic1	1 if the worker experiences difficult or unconfortable working positions , 0 otherwise	0	1
shift	1if the worker works in shifts , 0 otherwise	0	1
morning-fixed	1 if the worker works on fixed morning duty, 0 otherwise 0 1	0	1
night-fixed	1 if the worker works on night duty, 0 otherwise 0 1	0	1
evening-fixed	1 if the worker works on evening duty, 0 otherwise 0 1	0	1
no train	1 if the worker has not partecipated in training courses at the workplace, 0 otherwise 0 1	0	1
team	1 if the cooperation between the worker and his/her collegues is always/often working well, 0 otherwise	0	1

Table 2:Descriptive Statistics, means

	All sample	Quit=1	Quit=0
female	0.476	0.457	0.486
age	39.45	35.871	40.438
educyears	12.945	12.799	12.935
married	0.528	0.425	0.548
ten	5.991	3.813	6.47
wage	165.926	160.328	166.306
phy-harm	0.438	0.465	0.428
term-harm	0.426	0.445	0.419
chem-harm	0.268	0.295	0.262
respir-hazard	0.225	0.245	0.219
skinc-hazard	0.074	0.091	0.071
mat-harm	0.062	0.062	0.061
ergonomic1	0.924	0.924	0.925
shift	0.132	0.153	0.128
morning-fixed	0.005	0.007	0.005
night-fixed	0.017	0.027	0.015
evening-fixed	0.022	0.025	0.023
evertrain	0.524	0.433	0.535
fsize	5191.025	4764.107	5267.737
Nobs	6714	1963	5571

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