

Fear of the dark?  
Employment insecurity and health in Denmark

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**Abstract**

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## 1. INTRODUCTION

Over the past two decades, higher foreign competition, firms' downsizing and work re-organization, as well as institutional reforms aimed at reducing employment protection and increased labour market flexibility, caused deep changes in the economic and social environment in many European countries, leading to higher levels of perceived work-related instability (Cappelli et al, 1997).

'Employment insecurity' – as the OECD (2004) defines all job-related perceived uncertainty - has two main domains. The first is job insecurity, related mostly to the fear of losing one's job. This is the dimension more directly affected by the consequences of rapid changes of work environment and increased labour flexibility. The second is employability, i.e. the ability of workers to find new jobs if current ones are lost, which is more related to the prospects when unemployed, and it is influenced by factors like e.g. the availability of labour market or income policies for the unemployed, or the amount of specific human capital the worker possesses. As compared to job lost expectations, employability encompasses a longer time horizon since it is conditional to the loss of current job, and concern what happens after that loss. The perception of being easily re-employable may limit the detrimental impact of job insecurity on well-being. In general, higher insecurity about employability may increase uncertainty and amplify well-being effects of job insecurity.

Although perceived employment insecurity is an internal feeling and not an actual event, an individual worried about losing a job or to be not easily unemployed may experience stress and anxiety because she anticipates the consequences associated with an actual job loss, mental strain and uncertainty for the future. A number of studies show that these circumstances can be as stressful as actual job losses or long unemployment spells (Dickerson and Green, 2012).

Higher perceived employment insecurity, in the form of job or employability insecurity, poses key policy challenges as it may affect various dimensions of workers' well-being, such as higher stress levels for workers, lower mental health and lower productivity, especially in absence of public or private insurance devices and for risk averse employees.

In this paper we use matched employer-employee data for Denmark (IDA) merged with the Danish Work Environment Cohort Survey (1995-2000-2005) to analyse the effect of employment insecurity, measured by both job insecurity and employability insecurity, on two health-related indicators: Mental Health (MH) and Vitality (VT).

Our paper makes three contributions to the existing literature. First, we use a broader and more encompassing definition of job insecurity. In addition to a variable for the fear of losing the current job ('job retain insecurity'), we also use a variable for the possibility of being transferred to a less interesting job with the same employer without actually being made redundant. Because of 'functional flexibility' firm's policies due to e.g. re-organization, outsourcing or takeover decisions, such 'job status insecurity' – as we will call it - has been increasing in Europe since at least 2000, but there is little scientific evidence about its effects on health and well-being (Green, 2015; Madsen, 2012).

Second, we analyse whether the effect of employment insecurity varies across occupations and by years of tenure. We inspect these dimensions because in many countries – including Denmark - terms and conditions of employment protection are different by firms' seniority, and because in Denmark – unlike many other countries – they differ between blue and white collars. Third, the availability of a matched employer-employee dataset enables us to account in the estimates for firm fixed effects in addition to individual ones.

Our results suggest that workers who fear to lose the job experience worse mental health and less vitality, thus confirming the existing evidence. Job status insecurity affects only mental health of workers, whilst employability insecurity affects both mental health and vitality of workers. Moreover, we find substantial heterogeneity by tenure (attenuated effects by increasing tenure especially for job retain insecurity) and occupation (white collars are worse off in their health gradient compared to blue collars).

The paper is organised as follows. In Section 2 we review the relevant literature and institutional background, while the methods (data and empirical strategy) are overviewed in Section 3. In Section 5 we present the main results, which are discussed in Section 6.

## 2. BACKGROUND AND RELATED LITERATURE

The effect of employment insecurity on well-being in general and health in particular reflects – among other things - the expectations about the amount of insurance against income risks received by the worker when unemployed.

These expectations have a subjective component, filtered by worker's attitudes (risk aversion, pessimism, etc), ability and ex-ante knowledge of the consequences of a job loss; but are also function of objective factors that influence how severe these consequences are. Among the latter, the policies to reduce income losses and to help finding a new job play a key role. The leading example is job protection rules, that are designed not only to insure against income risks by reducing the probability of job loss; but also to provide income security after a job loss, for example through notice period plus severance/compensation pay. Since they are function of the current job, they are expected to influence more the health effect of job insecurity than of employability insecurity.

The second source of income security is workers' protection in the market by unemployment benefits and active re-employment policies, which are more related with employability insecurity and its consequences on well-being and health.

In general, the degree of income protection – either job-related and in the market - is function of workers' observable characteristics. For example, in many countries both notice periods and severance payments depend on the number of years spent with the same employer. Hence, *ceteris paribus*, we expect that the health effects of employment insecurity are heterogeneous over the dimensions that affect the generosity of income security.

Denmark is an interesting country in this context since it is characterized by a 'moderate' employment protection, but also high unemployment insurance and active labour market programs that increase employability of workers. Overall, the levels of perceived job insecurity are rather low (OECD, 2004).

As in many other Euro Countries, in Denmark severance and, especially, compensation payments increase with tenure, being equal on average to 9 months at 20 years. Also notice periods increase by tenure: with six months of tenure the notice is one month, with six years of there is 4 months.

For our purposes, another interesting and rather peculiar feature of Denmark is that employment protection's terms and conditions are rather differentiated between white and blue collars (OECD, 2004, 2013). The main difference is that for white collars employment protection is regulated by law, while for blue collars the norms are defined by collective agreements. In both cases, tenure plays a key role. For example, the length of notice periods at twenty years of tenure is 6 months for white collars and 10 weeks for blue collars; Compensation pay for unfair dismissal is up to 52 weeks for blue, and up to 6 month for white.

Finally, another relevant feature of the Danish labour market is that, thanks to the high job flexibility and the effectiveness of active labour market policies, the rate of job mobility is high<sup>1</sup>, which is key for identification in the empirical analysis.

Several papers analysed the well-being consequences of job insecurity, measured by the fear of losing the current job. A robust finding in the literature is that job insecurity is a source of lower health and well-being because it increases stress (Burchell, 1994; Nolan et al., 2000; Wichert, 2002; Cheng and Chan, 2008, Ferrie et al. 2001, Ferrie et al. 2005). Many have found that job insecurity as perceived by the worker is a source of low job satisfaction irrespectively from the type of contract (Origo and Pagani, 2009; Bardasi and Francesconi, 2004). The majority of the literature focuses on a single country, due to data shortages only few papers provide cross countries evidence. Caroli and Godard (2014) estimate the causal effect of job insecurity on health for a big sample of 22 European countries and find that the health damaging effect of job insecurity is confirmed for a limited subgroup of health outcomes.

Little is known about the impact of employability on the well being among employed people. Some evidence that being easily re-employable has positive association with health the fear of job loss might be mediated/reduced by employability. De Cuyper et al. (2008) find a cross-sectional positive association between employability and well-being among Belgian workers. Berntson and Marklund (2007) find a positive association between some indirect employability and mental wellbeing. Green (2011) finds that employability strongly moderates the effects of unemployment and of job insecurity on life satisfaction and mental health.

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<sup>1</sup>Denmark ranks at the low end of the international scale in terms of average job tenure, along with countries such as the United Kingdom and the United States (OECD, 2004).

To our knowledge, there is no evidence about the effects of job status insecurity on health, nor on how the effect varies by tenure and occupation.

### 3. METHODS

#### *3.1. Data, variables and descriptive statistics*

The data we use derive from two different sources that are matched through individual identifiers. First, a panel data collected every 5 years from 1990 to 2005 by the Institute for Occupational Health (AMI) that is the "The Danish Work Environment Cohort Study (DWECS)". The survey contains information on several aspects of the work environment, including workers' subjective evaluation of employment risks and insecurity, as well as on health outcomes, lifestyles and other firm and personal characteristics. For the purpose of the paper we focus only on 1995, 2000 and 2005 since the full set of variables describing employment insecurity and health outcomes is available only for these years.

Second, we use Statistics Denmark Integrated Labour Market Database (IDA), which is the matched employer-employee archive comprising the Danish population of individual and establishment administrative records together with background characteristics. Danish administrative registers record individual annual earnings as well as demographic and firm characteristics. Even though IDA comprises the whole population of Danish firms and workers, when matched to the longitudinal component of DWECS we end up having an unbalanced panel dataset of about 3,600 workers for 8,600 observations, approximately half are males and half females.

Our main outcomes are two health-related variables of common use in the epidemiology and occupational health literature (Kristensen et al., 2002; Poulsen et al., 2013; Rugulies et al., 2006). The first is a Mental Health (MH) index based on the five questions of the so-called Mental Health Inventory (MHI-5), subscale of the Short Form Health Status Survey (36

items, SF-36). The five questions are: "How much of the time during last month you felt: nervous/down/blue/not happy/not calm and peaceful?". The second indicator is Vitality (VT) and it is based on 3 questions from the SF-36 ("How much of the time during last month you felt: full of pep/worn out/tired"). A number of validation studies based and factor decomposition analyses show that VT stands somehow in between mental and physical health.

MH and VT indexes are constructed by adding up answers of the associated questions, which range from 1 ('none of the time') to 6 ('all of the time'). The resulting scales have been transformed to vary between 0 (low health = severe health problems/ limitations/ diseases) and 100 (high health = no health problems or chronic diseases), with equal weight given to the individual questions on the scale, and have an acceptable Cronbach's alpha values. Low values of our MH index are intended to capture general psychological distress (nervosism/depression), while VT captures energy.

For what concerns worker's perceived employment insecurity, we consider both job insecurity (lack of continuity in the current job) and insecurity in the labour market (lack of continuity in employment if the current job is lost). Job insecurity is further distinguished into its 'quantitative' and 'qualitative' dimensions. The first is measured by the dummy 'Job Retain Insecurity' (JRI) which takes value 1 if the worker mentions to 'worry about losing the current job'. It reflects the perceived amount of employment protection at the workplace. 'Qualitative' job insecurity refers to the probability of losing valued job aspect even without being made redundant. Our measure for that is the dummy 'Job Status Insecurity' (JSI), equal to one if the worker worries about the possibility of being 'Transferred (within the same company) against will'.



Insecurity in the labour market is measured by the dummy ‘Employability Insecurity’ (EI), equal to one if the worker declares it would be ‘Difficult to find a new job with present qualifications (if the current one was lost)’.

We also control for a number of additional individual and firm characteristics: gender, marital status, presence of children in the household, educational levels, a set of age dummies, dummies for being a current or former smoker, and the body mass index; dummies for firm's size, as well as sector and occupational dummies. We further control for the natural logarithm of individual income, regional and time dummies. A description of the main variables and of the sample is in Table 1.

[TABLE 1 ABOUT HERE]

As suggested by existing evidence, Danish workers are characterized by high levels of mental health: the mean score of MH is 85, well above critical values for depression (52 to 72, depending on the validation study considered and on the gravity of the condition) and evidence for other countries (Green, 2011)<sup>2</sup>. The mean of vitality index is 73 out of 100, and more dispersed than MH, although constructed using less items than MH. About Both 15 percent of employees are affected by perceived ‘Qualitative’ and ‘Quantitative’ Job Insecurity, which are not big numbers but however similar to the European average (Caroli and Godard, 2014) and higher than what has been found for Australia (Green, 2011). Re-employability Insecurity is reported by 23% of the whole sample. In countries like Australia where unlike Denmark there is not a ‘flexicurity’ system these numbers are higher (35%, see Green, 2011).

[TABLE 2 ABOUT HERE]

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<sup>2</sup> Validation studies have shown validity of the Danish SF-36 (Bjorner et al. (1998) among others).

Since in our empirical analysis we will present estimates both on the whole sample and by occupation, in Table 2 (panel a) we also describe the sample separately for blue collars and white collars. The mean scores of MH and VT are higher for blue collars compared to white collars (86 versus 85 for MH and 73 versus 72 for VT respectively) and their difference although small it is statistically significant. Also all indicators of perceived employment insecurity show higher prevalence among blue collars compared to white collars and statistically significant differences (18% versus 14% for job retain insecurity, 15% versus 12% for job status insecurity, 25% versus 20% for employability insecurity). Moreover, our descriptive evidence shows some heterogeneity by tenure: 10 additional years of tenure increase our MH and VT index by nearly 1 point, while decreases Job retain insecurity by 2 percent and increases re-employability insecurity by 6 percent.

### 3.2. Empirical modelling

Consider the following linear model of workers' health-related variables  $y$  (either MH or VT) for the  $i$ -th individual at time  $t$ , which allows for both person and firm determinants of individual health, and also for observed and unobserved factors in both dimensions:

$$y_{it} = \beta x_{it} + \gamma Job\ Ins_{it} + \delta Empl\ Ins_{it} + a_i + \theta_{j(i,t)} + \tau_t + \varepsilon_{it} \quad (1)$$

$y_{it}$  is decomposed into a part explained by observable and possibly time-varying individual and firm characteristics  $\beta x_{it}$ , the job insecurity vector  $Job\ Ins_{it}$  (which includes job retain and job status insecurity), employability insecurity  $Empl\ Ins_{it}$ , an individual effect  $a_i$ , a firm effect  $\theta_{j(i,t)}$  for the firm at which worker  $i$  is employed at time  $t$ , a time shifter  $\tau_t$  and a time-varying residual  $\varepsilon_{it}$ . This is the baseline specification. An first augmented specification also includes a vector of two interactions  $Job\ Ins_{it} * Empl\ Ins_{it}$ , useful to evaluate the extent to which job insecurity and labour market insecurity interplay each other, i.e. if perceived employability perspectives are different according to perceptions of job loss. A second

specification includes a vector of interactions between  $Job\ Ins_{it}$  and  $Empl\ Ins_{it}$  and tenure and tenure squared necessary to evaluate if tenure plays any role in the effect of job and employment insecurity.

The fact that both measured and unmeasured individual and firm effect may correlate each other creates a number of empirical problems to interpret the estimates as causal. First, since outcomes and insecurity are based on subjective evaluation, they may be simultaneously influenced by unobservable personal traits ('endogeneity' due to unobservable individual characteristics). Second, 'reverse causality' arises if for some unknown reason higher health may secure more stable jobs and better labour market prospects if unemployed. Third, also unobserved firm characteristics may simultaneously correlate with perceived health and insecurity. For example, a firm with a 'good' climate and nice working conditions may be a workers' high-health firm (with health levels higher than expected given observable characteristics) and, at the same time, reduce the fear of job loss among its employees ('endogeneity' due to unobserved firm characteristics).

Standard fixed effect models with controls only for time invariant individual heterogeneity neglect the role that firm heterogeneity plays in this context, do not allow to identify separately individual and firm effects and generate generating inconsistent estimates of the parameters (Abowd et al., 1999).

The matched (persons and firm) longitudinal nature of our data allows us to perform a further step in the direction of a causal interpretation of the estimates by simultaneously controlling for unobserved effects of workers and of their employing firm. As usual, these 'two-way' fixed effects are consistent if there are not omitted time-varying factors that are correlated with both health-related variables and insecurity variables. Another potential source of bias which we cannot control is endogenous selection into employment not due to fixed

personal traits: since our sample includes only workers, estimates refers only to the subpopulation of employed individuals, and not to unemployed. As suggested by Jackle and Himmer (2010), the bias induced by unobserved individual and firm characteristics that change over time is mitigated by the inclusion of a rich set of individual and firm characteristics, plus lifestyles such as smoking and food habits may reduce this bias and working conditions variables.

#### 4. RESULTS

Our baseline model consists in the estimation of equation (1) controlling for individual demographics, job insecurity indicators and other observable firm characteristics. This baseline specification is estimated with random effects (columns 1 and 4 of Table 3), individual fixed effects (columns 2 and 5 of Table 3) and firm fixed effects plus individual fixed effects (column 3 and 6 of Table 3). We will present results for the interacted models only using our preferred specification that includes both individual and firm fixed effects (Table 4) and for specific groups of workers (Table 5).

In line with our predictions all indicators of employment insecurity show a negative and statistically significant coefficient (Table 3). First we confirm that Job Retain Insecurity significantly reduces both mental health and vitality of workers, being the effect on mental health bigger (-3.5 percentage points for mental health versus -2.7 percentage points for vitality) and showing bigger coefficients compared to the other indicators of job insecurity. Job status insecurity do matters for both mental health and vitality of workers but the coefficient estimates are very similar. Employability insecurity impacts negatively on mental health and vitality, and surprisingly the effect is double in the case of vitality.

As to the other control variables included in eq. (1), mental health and vitality follow similar patterns: are U-shape with age, are greater for those who are married than for the

widows or divorced, and decreases for higher body mass indices, less clear cut results are found with respect to the other lifestyles<sup>3</sup>.

[TABLE 3 ABOUT HERE]

There may be unobserved time invariant factors correlated both with the employability and insecurity variables and with mental health and vitality, in this case the random effects estimator will be inconsistent. Accordingly, columns (2) and (5) present fixed effects estimates. The point estimates are, in all cases, lower, than in the random effects model and still maintain statistically significant coefficients at conventional levels (except in the case of Employability Insecurity in the equation for Vitality). A Hausman test rejects the hypothesis that the difference in coefficients is unsystematic, and accordingly the fixed effects estimates are preferred.

It should be noted that other time invariant characteristics that are not individual might bias our estimates, to overcome this limitation we estimate eq. (1) including also firm fixed effects. In the case of mental health results confirm that all three indicators of employment insecurity do matter, while in the case of vitality only the effect for employability insecurity remains statistically significant although the coefficient is reduced.

Finally it is interesting to notice that results are robust when we account for both unobserved firm and individual heterogeneity, while firm effects capture a substantial portion of health variance giving more precise estimates<sup>4</sup>.

[TABLE 4 ABOUT HERE]

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<sup>3</sup> Results that include all control variable are available upon request from the authors.

<sup>4</sup> The fraction of variance being explained by the model in the case of MH passes from 0.3 for random effects, to 0.5 for individual fixed effects and to 0.8 in the case of two way fixed effects. In the case of VT it passes from 0.35 for random effects, to 0.53 for individual fixed effects and to 0.8 in the case of two way fixed effects.

In Table 4 we present results with the interaction between Job Retain and Job Status Insecurity and Employability (column 1 and column 3) and between all indicators of employment insecurity and tenure and tenure squared (column 2 and column 4). In contrast with the existing literature, we find that the interaction terms between insecurities are never statistically significant in the case of both MH and VT, thus our findings do not support the idea that the effect of job insecurity on wellbeing is greater where a worker perceives a lower chance of being reemployed in a good job. As to tenure, we find that it significantly reduces job retain insecurity only in the case of MH, while no effect is found for job status insecurity and employability insecurity.

[TABLE 5 ABOUT HERE]

To see whether the effects of employment insecurity differ by type of occupation, our preferred specification is estimated for blue collars and white collars. The results are shown in Table 5, columns (1) and (2) for blue collars and columns (3) and (4) for white collars. Employability Insecurity maintains statistically significant effects for both subsamples, while the effect in the of mental health and white collars is more than double of those of blue collars. Surprisingly Job retain insecurity seem to matter for the mental health of white collars, while job status insecurity for the mental health of blue collars.

### *Robustness Checks*

While we controlled for time-invariant effects both at the individual and firm level, it is always possible that other time-varying variables are associated with both insecurity expectations and well-being. Endogenous selection into labour market status could be a further source of bias. For this reason, we test the robustness of our results by performing a number of sensitivity checks to s. All tests use our preferred specification that is reported in columns 3 and 6 of Table 3. First, we augment specification of eq. (1) by a set of job quality

indicators to capture working conditions that are changing over time not captured by firm fixed effects (e.g changing working conditions due to changes in the management of the firm). The working conditions used in this specification consist in both psychosocial conditions as well as physical hazards. Results in terms of magnitude and statistical significance are substantially unchanged. Second, we run all specifications using the plant identifier instead of the firm identifier. Also in this case results are very similar to the results reported in Table 3, Table 4 and Table 5<sup>5</sup>.

## 5. DISCUSSION

We used three indicators of employment insecurity to analyze their effect on mental health and vitality using Danish matched employer-employee data. As already found by studies for other countries – characterized by different institutional settings - we confirm that also Danish workers who fear to lose their job experience worse mental health. We find that the same occurs for another dimension of job insecurity - the fear of being transferred against will – which has been never considered before. Our results are robust when we account for both unobserved firm and individual heterogeneity. Interestingly, we find that time invariant firm characteristics capture a substantial portion of health regressions' variance, and that in some cases this reduces the magnitude or the statistical significance of job insecurity coefficients, as compared to standard individual fixed effects models. As a result, previous studies that ignored firm unobserved heterogeneity might have overestimated the effect of work-related insecurity. Also employability insecurity matters for mental and vitality of employees. In general, its coefficient is the highest among the three employment insecurity variables, and it plays the bigger role for vitality. This is interesting, for a number of reasons. First, because employees does not seem to discount the future a lot: it seems that their current perceived health is more affected by a negative event (difficulty of finding a new job

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<sup>5</sup> All these results are available upon request from the authors.

conditional on the loss of the actual one) which is more in the future than the loss of the actual job. Second, this implies that what matters more for the well-being of Danish employees is not the uncertainty associated with the current job, but the uncertainty for future prospects in the market. This is somehow surprising, since in a flexicurity system like the Danish one we would have expected that the high levels of unemployment benefits and the comprehensive system of active labour market policies (training, job search support, etc.) would have limited the expected well-being impact of not being easily re-employable at similar conditions. All in all, it seems that they feel themselves not insured enough once they lose the actual job.

All the three dimensions of employment insecurity show heterogeneous results by occupation and years of tenure. As expected, the effects of job retention insecurity are attenuated for increasing tenure since income support by employment protection legislation increases with tenure, while no effects are found for the other two dimensions of insecurity. If tenure is also a proxy for the accumulation of specific human capital, this result suggests that, in general, it does not imply higher levels of stress or anxiety when the employee feels to be not easily re-employable.

Finally, the analysis by occupations revealed that employability insecurity affects the mental health and the vitality of both blue collars and white collars, but to a higher extent in the case of white collars.

Although the effect of employment insecurity are initially felt by the workers, the health consequences of each individual also extend to organizations, workers' families and, hence, to societies which must provide care through health systems. Workers' health is therefore not just a private matter for employees and employers, but also a matter for public policy.

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## TABLES

Table 1 – Main variables and descriptive statistics

Variable	All			
	Mean	S.D.	min	max
Mental Health(§)	85.68	12.10	0	100
Vitality	73.02	17.21	0	100
Job Retain Insecurity	0.16			
Job Status Insecurity	0.14			
Employability Insecur.	0.23			
Currently smoking	0.35			
Used to smoke	0.24			
Never smoked	0.41			
Body mass index (bmi)	24.44	3.69	14.69	67.38
Female	0.49			
Low educ	0.20			
Middle educ	0.55			
High educ	0.26			
Age [18, 30)	0.15			
Age [30, 40)	0.30			
Age [40, 50)	0.31			
Age [50, 65)	0.24			
If has children	0.54			
If married	0.63			
If widow	0.01			
If divorced	0.08			
Hourly wage	209.3	65.38	5.55	570
Tenure	6.77	6.97	1	41
If blue collar	0.51			
If white collar	0.47			
If manager	0.02			
If public employee	0.40			
Year 1995	0.34			
Year 2005	0.29			
Year 2000	0.37			
Resides in CPH region	0.26			
Resides in Central DK	0.40			
Resides in Jutland	0.33			
N. obs	8637			

Note: To save space, the distribution by firm characteristics (sector and size dummies) is available upon request. Standard Deviation is reported only for non-binary variables. (§)About 14% of the sample reports values of MH below or equal 72 (validated threshold for depression).

Table 2 – Health and perceived insecurity differences by gender, occupation and tenure

<u>Panel a.</u>					
<u>Variable</u>	<u>Blue</u>		<u>White</u>		<u>Differ.</u>
	<u>Mean</u>	<u>S.D.</u>	<u>Mean</u>	<u>S.D.</u>	
Mental Health	86.33	12.58	85.02	11.54	1.3***
Vitality	73.44	17.5	72.58	16.88	0.9**
Job Retain Insecurity	0.18		0.14		0.04***
Job Status Insecurity	0.15		0.12		0.03***
Employability	0.25		0.20		0.05***
Insecur.					
<u>Panel b.</u>					
	Differential for 10 additional years of tenure§:				
Mental Health	0.8***				
Vitality	0.7***				
Job Retain Insecurity	-0.02**				
Job Status Insecurity	0.001				
Employability	0.06***				
Insecur.					

Note. §: the coefficients are from a linear regression of tenure on the variables in the first column.

Table 3 – Mental Health (MH) and Vitality (VT) estimates, whole sample: Random effects (RE), Individual Fixed Effects (FE) and Individual & Firm Fixed Effects (2-FE)

	MH						VT					
	RE		FE		2-FE		RE		FE		2-FE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Job Retain Insecurity	-3.05 ***	-2.05 ***	-1.27 ***	-2.00 ***	-1.06 ***	-0.11	0.36	0.44	0.59	0.50	0.61	0.82
Job Status Insecurity	-1.87 ***	-1.05 ***	-1.67 ***	-1.79 ***	-0.32	-0.77	0.37	0.45	0.56	0.52	0.61	0.79
Employability Insecurity	-2.50 ***	-1.56 ***	-1.79 ***	-4.74 ***	-3.21 ***	-3.37 ***	0.32	0.41	0.51	0.45	0.56	0.71
N. observations	8,637	8,637	8,637	8,637	8,637	8,637						
N. of individuals	3,640	3,640	3,640	3,640	3,640	3,640						
N. of firms			3,481									3,481
N. movers			2,560									2,560
N. groups			792									792
Hausman (chi2)		119.2 ***							130.9 ***			
Person&firm eff. = 0 (F stat)			1.87 ***								1.91 ***	
Person effects = 0 (F stat)		2.06 ***	2.02 ***						2.3 ***		2.07 ***	
Firm effects = 0 (F stat)			1.23 ***								1.12 ***	
Fraction of variance due to person effects	0.3	0.49	0.61	0.35	0.53	0.59						
Fraction of variance due to firm effects			0.18								0.2	

Note: The RE regression includes controls for individual characteristics (gender, education, age, civil status, presence of children, lifestyles, region), job characteristics (white collar, blue collar, manager, tenure, tenure squared, wage), firm characteristics (sector and size dummies) and time dummies. The FE and 2-FE regressions only include time-varying variables plus individual and firm-group effects. 2-FE estimates and statistics are obtained from the 'felsesdm' command in Stata. The number of firm effects identified is around 70%. Robust standard errors in parentheses. \*\*\* p-value < 0.01; \*\* p-value < 0.05; \* p-value < 0.1.

Table 4 – 2-FE estimates of MH and VT: Interacted effects

	MH		VT	
	(1)	(2)	(3)	(4)
Job Retain Insecurity	-1.721 ***	-2.780 ***	-0.971	-1.630
	0.778	1.130	1.096	1.600
Job Status Insecurity	-1.403 ***	-1.930 **	-0.556	0.116
	0.700	1.060	0.987	1.500
Employability Insecurity	-1.879 ***	-1.444	-3.662 ***	-3.410 ***
	0.576	0.963	0.812	1.359
Job Ret. Ins.*Empl. Ins.	1.041		1.896	
	1.106		1.551	
Job Stat. Ins.*Empl. Ins	-0.754		-0.678	
	1.080		1.532	
Job Ret. Ins.*Tenure		0.411 ***		0.305
		0.213		0.300
Job Ret. Ins.*Tenure2		-0.016 ***		-0.008
		0.008		0.011
Job Stat. Ins.*Tenure		0.026		-0.218
		0.201		0.284
Job Stat. Ins.*Tenure2		0.000		0.007
		0.007		0.010
Empl. Ins.*Tenure		-0.069		-0.031
		0.155		0.219
Empl. Ins.*Tenure2		0.002		0.002
		0.005		0.007
N. obs.	8,637	8,637	8,637	8,637

Note: See Table 3. The number of individuals, firms, movers and group is the same as in Table 3.

Table 5 – 2-FE estimates of MH and VT: Blue & White collars

	BLUE		WHITE	
	MH	VT	MH	VT
	(1)	(2)	(3)	(4)
Job Retain Insecurity	-0.332	0.189	-2.830 ***	-1.598
	0.921	1.292	1.056	1.544
Job Status Insecurity	-3.231 ***	-1.868	0.706	0.978
	0.913	1.280	0.934	1.367
Employability Insecurity	-1.522 *	-3.934 ***	-3.486 ***	-4.043 ***
	0.824	1.156	0.899	1.315
Nobs	4,379	4,379	4,258	4,258

Notes: See Table 3.