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Job Insecurity, Employability, Unemployment and Well-Being.

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ABSTRACT

This paper shows that employability strongly moderates the effects of unemployment and of job insecurity on well-being. I develop a simple framework for employment insecurity and employability with two key features. First, it allows for the risks surrounding unemployment and employment transitions to affect well-being both directly and indirectly through their impact on expected income. Second, the framework allows for the interaction between unemployment and employability, and between job insecurity and employability. Using panel data from Australia, I provide new random effects and fixed effects estimates of the impact of unemployment and of job insecurity on life satisfaction and on mental health, in the context of a model that takes account of the interacting risks. As predicted, unemployed people with little hope of finding a job enjoy the least well-being by a considerable margin, while employed people who are both highly employable and in a secure job enjoy the most. In between there is substantial differentiation according to employability, job insecurity and their interaction. Compared to a secure job the deleterious effects of high job insecurity on well-being are comparable to the effects of unemployment. Both are substantial. The findings are used to compute estimates of the well-being trade-off between increases in job insecurity and increases in employability, relevant to the support of "flexicurity" and similar employment policies.

Keywords: life satisfaction, mental health, unemployment, employment, job insecurity, employability, flexicurity, employment insecurity, flexibility.

JEL Classification: J28, J6, I12.

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Introduction.

> *Luiz Felipe Scolari has shrugged off the pressure mounting on him at Chelsea and declared that another managerial position would always be around the corner for him. "If I lose my job, I have another job …… Maybe tomorrow, maybe after one year or two years. I have worked for 25 years." (Guardian, 14 January, 2009).*

It has been firmly established, in a wide range of empirical studies at individual and country levels, that unemployment is detrimental for health and well-being, both in itself and because it entails a loss of income. At the same time, a large number of psychological studies and a few in economics have found that job insecurity itself also generates substantial losses in well-being. The problem which I address in this paper is that an important reason for heterogeneity in the effects of unemployment and job insecurity is rarely recognised in theory or empirically investigated: namely, that employability matters. The Guardian quotation illustrates one instance of this proposition: Chelsea coach Scolari was reported to be unconcerned by his job being at risk because he felt he was very employable.[1] More generally, the effects on well-being of being unemployed or of the fear of job loss are each mitigated if there are good prospects of finding another job.

In this paper I develop a simple conceptualisation of employment insecurity and employability that enables this differentiation to be analysed. This conceptualisation has two important features. First, it allows for the uncertainty surrounding unemployment and employment to affect well-being both directly and indirectly through its impact on expected income. The direct effects are justified in psychological and social theory, while the indirect effects are economic. Second, the framework allows for the interaction between unemployment and employability, and between job insecurity and the employability of the employed. To empirically implement this framework, the three key variables – employability of the unemployed, job loss risk, and the employability of the employed – are directly measured by the subjective expectations of the probabilities of future employment transitions.

[1] An additional reason for his lack of concern might be his wealth, making it easier to tide over job loss than someone with no assets or alternative income sources.

An understanding of the role of employability in modifying the detrimental impacts of unemployment and job insecurity is greatly relevant to the formation of unemployment and employment policies. European debate, for example, in recent years has focused on "flexicurity", a strategy to devise employment and welfare legislation that will optimise the ability of employers to redeploy labour (thereby raising job insecurity) while at the same time providing generous support and training for the unemployed (European Commission, 2007). The latter is argued, not only to be efficient, but also to provide a political compromise by protecting the welfare of the unemployed. There is, however, no empirical evidence through which the impacts of job insecurity and of employability could be compared, and the trade-off evaluated from the perspective of the well-being of workers.

My findings provide new estimates of the impact of unemployment and of job insecurity, in the context of a model that takes account of the effects of the interacting transition risks. These findings are gleaned using fixed effects estimation on panel data, and are therefore more confidently interpreted as causal than in the many cross-section studies in the literature. I am therefore able to examine more comprehensively how the magnitude of the effects of insecurity among employees compares with the effects of being unemployed. It turns out that, as predicted, unemployed people with little hope of finding a job enjoy the least well-being by a considerable margin, while employed people who are both highly employable and in a secure job enjoy the most. In between there is substantial differentiation according to employability, job insecurity and their interaction. Moreover I find that, compared to a secure job the deleterious effects of job insecurity on well-being are closely comparable to the effects of unemployment. My estimates also allow the trade-off between greater job insecurity and improved employability to be computed.

The paper proceeds as follows. Section 2 overviews the two literatures on unemployment and job insecurity, and sets up the simple framework and specification that takes account of the interactions among the uncertainties. Section 3 describes the data and Section 4 my findings, and I conclude in Section 5 with some policy implications.

2. Theory and Literature.

"The three million or so unemployed of 1932 means three million lives being wasted in idleness, growing despair and numbing indifference. Behind these three million individuals

seeking an outlet for their energies and not finding it, are their wives and families making hopeless shift with want, losing their birth-right of healthy development, wondering whether they should have been born. Beyond the men and women actually unemployed at any moment, are the millions more at work at that moment but never knowing how long that work or any work for them may last." (Beveridge, 1944: 247-8).

Whether or not they have a job workers face uncertainty: in any given period employees might lose their jobs, while the unemployed might find one. This uncertainty affects well-being both directly and indirectly through its impact on expected income. The aim of this section is to develop a simple framework that allows the (separate and interactive) effects on well-being of the different elements of this uncertainty to be distinguished.

Welfare-reducing uncertainty surrounding employment is what is typically referred to as employment insecurity. The narrower focus of most studies, however, is on the lack of continuity of the current job, i.e. job insecurity, conceived as the probability of involuntary job loss.[2] The broader concept of employment insecurity also encompasses uncertainty over future prospects in the labour market. Although employment insecurity is an objective concept, it also has an important affective dimension defined by how people perceive the uncertainty. The antecedents and consequences of job insecurity perceptions have received a great deal of attention in psychological studies. By contrast, the economics literature has largely been dominated by studies of objective ex-post indicators, such as redundancy or job loss (e.g. Nickell et al., 2002). Only quite recently has it been established that perceptions of job insecurity are quite well correlated with subsequent job loss frequencies (Campbell et al., 2007; Stephens, 2004; Dickerson and Green, 2006), in effect bridging two literatures.

A robust finding from the psychological literature is that job insecurity is a source of lower well-being (for good overviews see Burchell 1994; Nolan et al., 2000; Wichert, 2002; Cheng and Chan, 2008). This effect holds for a variety of indicators of job insecurity, including the form of employment contract (Kompier et al., 2009; Green and Tsitsianis (2005)). The main rationalisation in psychological theory is the argument that job insecurity is a stressor, leading to work strain. Loss of control over one's work and life situation is at the heart of this process, and the strain may be exacerbated by inability even to assess the chance of job loss. The impact is also interpreted as contributing to a repudiation of the implicit "psychological contract" between worker and employer (Mauno et al., 2005), and the effect of rising

[2] Job insecurity can also involve uncertainty over valued job features within the current job, including fears over promotion/demotion and relocation.

insecurity on health has also been seen as part of a shift in power relations (Scott, 2004). The economic rationale, namely that greater job insecurity entails a loss of expected income, is also found in some of the psychological theory, though with less prominence.

It is recognised that the impact of perceived job insecurity on well-being varies substantially among individuals (Sverke and Hellgren, 2002). The average effect in a group is also found to vary among socioeconomic categories, though there are few firmly established regularities across many studies (Nolan et al., 2000). Cheng and Chan (2008) find robust evidence that health outcomes were more severe for older than for younger employees. Mauno et al. (2005) and De Cuyper and De Witte (2007) find that the impact on job satisfaction is notably greater for permanent than for temporary contract workers. One perspective from psychology holds that the impact of insecurity is moderated by an individual's dependency on the current job, which is governed by alternative economic security and the degree of occupational mobility (Greenhalgh and Rosenblatt, 1984). This "dependency perspective" is essentially an economic interpretation: it proposes that job loss (hence also job insecurity) has greater effect for individuals who possess fewer transferable skills and are hence less employable. Dependency on one's job is also affected by institutional factors, and it has been found that high levels of employment protection legislation (EPL) in a country are associated with lower satisfaction with insecurity, among temporary contract workers and among permanent-contract workers in the private sector (Clark and Postel-Vinay, 2009). The latter finding is interpreted as EPL reducing outflows from unemployment, thereby raising the cost of job loss. Thus, the same risk of job loss has different well-being implications across differing institutional environments.

These findings about the effects of employment insecurity complement others from economics and psychology that unemployment itself is also associated with very substantial reductions in well-being (among others, Warr, 1987; Clark and Oswald, 1994; Bjorklund and Eriksson, 1998; Theodossiou, 1998; Winkelman and Winkelman, 1998; Clark et al., 2001; Clark, 2003; Cooper et al., 2008; Kassenboehmer and Haisken-DeNew, 2009). Dolan et al. (2008) provide a good overview of economic studies. The negative impact of unemployment holds even after one controls for the lower income that is associated with being out of work. It is not hard to rationalise the disutility as resulting from the disruption of structured activity, and from the social stigma and loss of identity. The macroeconomic impact of a high unemployment rate is especially high, and cannot be explained as deriving just from the effects on the unemployed; rather, the magnitude of the impact is interpreted as deriving from

an additional indirect effect via greater job insecurity for employees (Ditella et al., 2001, 2003; Luechinger et al., 2008). There is also evidence of some differentiation in the psychological impact of unemployment. For example, the effect of individual unemployment is less pronounced in areas of high unemployment, which is interpreted as a social norm effect (Clark, 2003; Shields and Wheatley-Price, 2005; Stutzer and Lalive, 2004; Powdthavee, 2007). Unemployment is thought to act as less of a stigma, and less of a threat to one's identity, when others around are also out of work. As Clark succinctly puts it: "unemployment always hurts, but it hurts less when there are more unemployed people around" (op. cit., 2003, p.346).[3]

Unemployment might also hurt a lot less, however, if there were a good chance of escaping from it soon. The uncertainty aspect of the impact of unemployment on well-being has, however, only barely been touched upon. The broad term "employability" refers to the ability of an individual to find and sustain employment. A characteristic of the individual in context, employability is indicated by the probability of obtaining employment, though often proxied by measures of its determinants (skills, adaptability and so on). The extent to which an unemployed person is employable will affect well-being, again both directly and indirectly because it raises expected income. The direct impact of increased employability derives from the purpose and hope that accompanies job search activities and from the anticipation of the future identity and activities attached to employment. Knabe and Rätzel (2008) report that better job prospects are a source of greater life satisfaction in an analysis of the German Socioeconomic Panel, and in so doing question whether the conclusions of Clark et al. (2001) concerning the impact of past unemployment on well-being are robust once one allows for the impact of future employment prospects.

In a parallel manner, little is known about the impact of employability on well-being among employed people. Employability might matter directly for the employed because it delivers greater control over one's career, or because it could be part of a "new psychological contract" in which the employer helps employees to acquire employment security even if they have less job security (De Cuyper et al., 2008). Lack of employability could also cause employees to become stuck in jobs they do not like, even if those jobs are secure. In support, De Cuyper et al. find a cross-sectional association between employability and well-being

[3] Clark et al. (2009) also find that the impact of the unemployment environment has a differentiated impact on male workers, though not on female workers, depending on their sense of insecurity. The interpretation of this differentiation evidently requires further investigation.

among Belgian workers. Berntson and Marklund (2007) find an association between some indirect employability indicators of employed individuals and mental well-being one year later. However, neither of these studies adequately capture the economic rationale through which employability potentially affects expected income, since they do not allow for any interaction between the impacts of job insecurity and of re-employment difficulty. Moreover, these studies do not control for time-invariant fixed effects which have been found to bias estimates in previous well-being studies (Ferrer-i-Carbonell and Frijters, 2004).

The central aim here, therefore, is to consider two issues:

- how far the ill effects of job insecurity are added to, and compounded by, lack of employability.
- the extent to which employability is important for mitigating the impact of unemployment on well-being

In addition the aim is to add confirmation to previous findings on the effects of job insecurity and unemployment, but in the context of a broader model which controls for employment insecurity and employability. A subsidiary aim is to consider whether there is differentiation in the effects of unemployment, employability and insecurity, according to gender, age and education.

The underlying model implied in the literatures above described views well-being as depending on expected income, job status, employability and employment insecurity. Since expected income itself depends on job status, employability and employment insecurity, these latter three variables affect well-being both directly and indirectly. The form of the impact of uncertainty depends naturally on the current status, whether employed or unemployed. If unemployed, there is uncertainty over whether a job can be found; a greater perceived chance (more employability) increases well-being. If employed, there is a risk of job loss in the current period and, conditional on that, uncertainty over whether the job will be replaced by another job that is as good. Both might lower well-being directly as well as reduce expected income.

To simplify I assume that well-being can be well enough approximated by a linear function. Individuals are assumed to be in either one of two labour market states, employed or unemployed. In each state they face a known chance of transition to the other. I assume that the unemployed, other than searching for jobs which they do, can do nothing additional to affect the transition probability. Similarly the employed, other than working diligently which

they do, cannot alter the risk of job loss. If they do lose their job, they may get another job giving the same wage as the previous one. But they might not obtain another job this period or, if they do, might have to settle for one with a lower wage.

Thus well-being, Y, is given by:

$$Y = U.\{\alpha[\eta w_r + (1-\eta)B + OH] + \eta E\} \\ +(1-U).\{\alpha[(1-\rho)w + \rho[\mu w + (1-\mu)\theta w + B] + OH] + (1-\rho)I - \beta\rho - \delta(1-\mu)\} \quad (1)$$

Here: U is a 0/1 dummy for employed/unemployed; η is employability for the unemployed, i.e. the probability when unemployed of gaining a job at the reservation wage, w_r; B is unemployment benefits (I assume $w_r > B$); OH is other household income; ηE is the well-being attached by the unemployed to the prospect of being employed *per se*; $(1-\rho)I$ is the well-being attached by employees to their current employment[4] at risk of involuntary loss, ρ; w is wages; μ is the probability of regaining as good a job as the previous one and is my measure of employability for the employed; θ is the wage of the post-displacement job, $\theta <= w$, and if no post-displacement job is found, $\theta = 0$; $(-\beta\rho)$ and $(-\delta(1-\mu))$ capture the direct well-being effects of insecurity .

The first expression is the well-being of someone who is unemployed but might gain a job in the current period at the reservation wage. If she fails to get a job she receives a benefit as well as other household income; but if she is successful she gains both the wage and the non-pecuniary well-being associated with getting a job per se. The second expression is the well-being of an employed person who might lose her job. If she keeps her job she receives both the wage and the well-being associated with employment per se (I). If she is displaced she experiences the loss of well-being associated with job displacement, though she receives a benefit payment. She might obtain another job at the same wage, but she might fail to get another job or only obtain one at a lower wage. The last two terms account for the potential direct effects of job loss risk and of re-employment difficulty (the converse of employability for the employed) on well-being.

One advantage of this formulation is that it shows the interaction between the probabilities that an employee faces. Equation (1) can be re-arranged as follows, in a way which brings out

[4] I and E are closely related; the difference is that whereas I is the well-being from employment for the employed, E is the prospective well-being from employment for the unemployed.

this interaction and generates a model that can be suitably tested with data on the transition probabilities, η, ρ and μ:

$$Y = (1-U).I + U.\eta(\alpha w_r - \alpha B + E) - (1-U).\rho(I - \alpha B + \beta) - (1-U).\rho(1-\mu)\alpha(w-\theta) - \delta(1-\mu) + \alpha.H \quad (2)$$

where *H* is total household income (including, in addition to other household income, wages if employed, benefits if unemployed). The first expression captures the well-being gain from being employed *per se*; the second is the net gain from employability if unemployed. The third term is the net loss from job termination in the event of regaining another equally good job. This is the base loss which could occur even if the post-displacement job has as good a wage as the current one (μ=1).

The fourth expression is the additional loss of well-being from job termination in the event that the post-displacement job is not as good or that no such job is found. In the empirical analysis that follows a question arises as to how to include $(w-\theta)$ the potential wage loss, since no items capture this. For the present I simply include this as part of the parameter to be estimated, but I consider an alternative assumption below. The fifth term is the direct impact of re-employment difficulty.

Allowing for other observed and unobserved determinants of well-being, this gives an estimating equation:

$$Y_{it} = a.U_{it} + b.U_{it}\eta_{it} + c.(1-U_{it}).\rho_{it} + d.(1-U_{it}).\rho_{it}(1-\mu_{it}) + e.(1-U_{it}).(1-\mu_{it}) + f.H_{it} + g.Z_{it} + u_i + \varepsilon_{it} \quad (3)$$

where Z_i is a vector of other observed personal characteristics typically found to be related to well-being in previous studies, u_i is an unobserved fixed effect, ε_{it} white noise.

The expectations are that: $\hat{a}<0, \hat{b}>0, \hat{c}<0, \hat{d}<0, \hat{e}<0, \hat{f}>0$. The existing empirical literature summarised above can be interpreted as robustly confirming the hypotheses that $\hat{a}<0$ and that $\hat{c}<0$ in many different countries and settings, and $\hat{f}>0$ is usually supported though sometimes the impact of income of well-being is weak. There is, by contrast, little empirical evidence concerning the hypotheses $\hat{b}>0$, $\hat{d}<0$ and $\hat{e}<0$. The first of these, $\hat{b}>0$, has been supported with panel data methods only in the case of Germany (Knabe and Rätzel, 2008). For the latter two hypotheses there is no existing evidence.

3. Data.

Equation (3) was estimated using panel data from the first seven annual waves of the Household, Income and Labour Dynamics in Australia Survey (HILDA). The survey began with a national probability sample of 7,682 households in 2001. All adult household panel members undertake a personal interview and fill in a self-completion questionnaire. Full details are given at: http://melbourneinstitute.com/hilda/ .

As outcome measures I use two alternative indicators of subjective well-being: life satisfaction and subjective mental health. Life satisfaction is measured through the item in the personal interview: "All things considered, how satisfied are you with your life?". Responses are given on an unanchored scale from 0 to 10, with a sample mean score of 7.84. Within the self-completion questionnaire mental health is computed from five "Short-Form Health Survey" (SF-36) items, which capture feelings in the previous four weeks. The questions ask how much of the time "Have you been a nervous person?"; "Have you felt so down in the dumps that nothing could cheer you up?" "Have you felt calm and peaceful?" "Have you felt down?" "Have you been a happy person?". Responses are on a 6-pt scale from "All of the time" to "None of the time". An additive index is created, with negative items counted negatively, and the score is transformed to a 0-100 scale.[5] Within the sample used the mean value is 74.6 and the standard deviation 16.1.

A distinctive feature of the HILDA data is that it includes direct measures of individuals' perceived probabilities of future employment and job loss. To capture employability for the unemployed, respondents with this status were asked: "I would like you to think about your employment prospects over the next 12 months. What do you think is the per cent chance you will find a suitable job during the next 12 months?"[6]. In seeking answers on a per cent scale, HILDA is consistent with the recommendations of Manski (2004). To capture the Probability

[5] The SF-36 is validated and widely-used for use in clinical practice, policy evaluations and surveys. The scales were computed by HILDA staff using Ware et al. (2000), and have been additionally validated for use in Australian populations (Butterworth and Crosier, 2004). In accordance with the manual, a person-specific raw score was estimated for any scale on which there were valid responses on greater than or equal to half the items, the average being calculated and applied to missing data.

[6] The reference to a "suitable" job is set against immediately prior questions on the reservation wage and preferred hours.

of Job Loss, ρ, employees were asked: "I would like you to think about your employment prospects over the next 12 months. What do you think is the per cent chance that you will lose your job during the next 12 months? By loss of job, I mean getting fired, being laid off or retrenched, being made redundant, or having your contract not renewed." Dickerson and Green (2006) show that the distribution of responses, though overly pessimistic and spiked in places, is reliable in that the perceptions are good predictors of subsequent job loss. The survey also asked employees to report directly on Re-employment Difficulty: "If you were to lose your job during the next 12 months, what is the per cent chance that the job you eventually find and accept would be at least as good as your current job, in terms of wages and benefits?" Responses on this scale are slightly optimistic relative to subsequent outcomes, but are also significant predictors of subsequent employment in a good job.

To measure the expected displacement cost accurately, data would be needed also on what happens if the job is not as good as the current. HILDA does not ask this. Hence, a simplifying assumption has to be made about the potential wage loss , $w - \theta$. In the first instance I take the loss to be a constant, and hence the expected displacement cost is simply captured by the product of the probability of job loss, ρ, and the probability of not finding as good a job, $(1-\mu)$. An alternative assumption could be that the loss is proportional to the wage. Below, I discuss the sensitivity of the findings to these alternatives.

Since only employees are asked the employment insecurity questions the sample is comprised of an unbalanced panel of individuals who are either employees or unemployed. I treat males and females separately, and descriptive statistics on both the outcome variables and all explanatory variables are provided in Table 1. As can be seen, among the unemployed the average expected probability of gaining a suitable job within a year is two thirds. Among employees, the probability of job loss averages out at about 1 in 10, and if job loss happens the probability of failing to find as good a job averages at just over a third.

4. Findings.

a) Core Findings.

The main findings are presented in Tables 2 and 3, which treat males and females separately. In Table 2, columns (1) and (4) present the random effects estimates of the impacts of employability and employment insecurity on life satisfaction. As can be seen, all the hypotheses about the impact on well-being are confirmed.

First, in confirmation of previous studies, both unemployment and the risk of job loss are sources of loss of well-being ($\hat{a} < 0$, $\hat{c} < 0$), for both males and females. Second, as predicted in equation (1) employability for the unemployed has a strong positive impact on well-being ($\hat{b} > 0$). Third, there is the predicted interaction between the probability of job loss and re-employment difficulty ($\hat{d} < 0$). In other words, the impact of job insecurity is much greater where an employee perceives a lower chance of regaining as good a job. Fourth, re-employment difficulty has a separate effect independent of job insecurity, $\hat{e} < 0$. Finally, the effect of household income on well-being is relatively small, as has been found in previous work, and in the case of males not statistically significant.

The other variables have been included in the equation following a range of other studies of life satisfaction and mental health. Consistent with these, it is found that life satisfaction follows a U-shape with age, is greater for those who are married or co-habiting than for the single, increases with the number of dependent children, and decreases with a long-term health condition or disability. Living in a region away from the major Australian cities brings higher life satisfaction for both males and females. Finally, I included a variable to control for whether another adult is present during the interview, since previous research has found that their presence is liable to generate a social desirability bias (Wooden et al., 2009). The proposition is that some respondents may not like to reveal too low well-being before their family. Table 2 shows that there is a notable upward effect on recorded life satisfaction for both males and females.

While these controls perform as expected, as in earlier studies only a small proportion of the overall variation of life satisfaction is explained by the variables. There are clearly many other factors that impact on employees' feelings. The effects shown in the table would be biased if excluded factors were correlated with the unemployment and insecurity variables. It is also possible that there is reverse causation, with lower well-being affecting both employment participation and insecurity.

An employee's personality is one factor that could have an impact on perceptions of employability and insecurity, as well as on life satisfaction. In Wave 5 of the Panel, respondents' personalities were assessed using multiple items from which were derived the "Big 5" personality scales: extroversion, agreeableness, conscientiousness, emotional stability and openness to experience. To see whether personality could be a factor accounting for the observed effects of employability and insecurity, these five indices were introduced in

the model, assuming that personality did not change over time. At the same time, another time-invariant factor is introduced, namely highest education level. The results are shown in columns (2) and (5). Note that, for this estimation, the sample size is reduced as it can apply only to those who were respondents in Wave 5. As can be seen, each of the five personality dimensions has a significant effect on expressed life satisfaction, all positive with the exception of openness to experience. Despite this, the estimated effects of unemployment, employability, the probability of job loss, and the interaction with the difficulty of re-employment, remain highly significant in the expected direction, and are not greatly changed from their values given in columns (1) and (4).

There may, however, be other unobserved time invariant factors correlated both with the employability and insecurity variables and with life satisfaction, in which case the random effects estimator, though efficient, will be inconsistent. Accordingly, columns (3) and (6) present fixed effects panel estimates. These fixed effects estimates are consistent, under the assumption that there are no omitted time-varying factors that are also correlated with the employability and insecurity variables. The point estimates are, in some but not all cases, somewhat lower, than in the random effects model. A Hausman test rejects the hypothesis that the difference in coefficients is unsystematic, and accordingly the fixed effects estimates are preferred.[7] From the fixed effects estimates, the broad pattern of findings remains unchanged in that the core hypotheses are still accepted.

How large are the relative effects of unemployment, unemployment and insecurity on life satisfaction? Consider, first, a male "no-hoper", an unemployed man who perceives that the chance of getting a job in the coming year is zero. (About 1 in 10 of the unemployed think this chance is less than 10%). Using the preferred fixed effects estimates, such a man's life satisfaction is lower by 0.77, compared with if he were in a secure job with no perceived risk of job loss and highly employable. This is more than one half of the standard deviation of life satisfaction (see Table 1). Consider, instead, an unemployed man who is expecting definitely to get a job within a year. (Just over 1 in 5 of the unemployed are in this category). This man's predicted life satisfaction is only 0.20 (= 0.77-0.57) lower than if he were in a secure job[8]. For women, the story is similar. The unemployed no-hoper's well-being is estimated to be 0.57 lower than if she were in a secure job, but if she could expect definitely to get a job within a year, the loss in well-being is reduced to 0.12. In short, the potential penalty of

[7] The χ^2 statistic was 105.6 (p = 0.000) for men, and 190.6 for women.

[8] This difference is statistically significant at the 1% level.

unemployment is very large, as other studies have found; however, when circumstances allow a person to have confidence in gaining a job the adverse effects of unemployment are greatly but not completely mitigated.

Previous studies have asserted that job insecurity can be as detrimental for life satisfaction as actually becoming unemployed (Wichert, 2002; Sverke and Hellgren, 2002). What, then, is the impact of high job insecurity (exemplified by a man who thinks he will definitely lose his job within a year). The size of the impact of job insecurity depends a great deal on the perceived probability of being able to regain another job as good as the current one. In the baseline case, those who expect to do so with 100% probability – one might dub this the "Scolari case" – the impact of a 100% fear of job loss is just 0.23 and 0.25 for men and women respectively. But, to take the opposite extreme, where respondents expect that there is no chance of replacing a lost job with one just as good, their life satisfaction is reduced by 0.64 for men and 0.45 for women. These estimates of the extreme downside of insecurity and employability are not far short of the worst unemployment effects.

The most informative comparison might be made between very insecure employees (for whom ρ = 1) of average employability and unemployed people with average employability. Using the descriptives from Table 1, the very insecure employee's life satisfaction is 0.38 for men (0.32 for women)[9] below that of someone in a secure job with no perceived risk of job loss, whereas the unemployed person with average employability has 0.39 (0.27 for women) less life satisfaction.[10] It seems that, when insecurity is extreme, it can be as bad as unemployment in its effects on well-being.

However, it should be recalled that only a small proportion of employees report this extreme of job insecurity. Among those who have a positive expectation of job loss, the modal subjective probability is just 10%, and the detrimental impact on well-being of job loss fear at this level is substantially less than that of being unemployed.

The findings for the impact on mental health, shown in Table 3, portray a broadly similar pattern to those for life satisfaction. This consistency is a re-assuring finding in itself, since the source of the data for mental health is the self-completion questionnaire, while that for life satisfaction comes from the face-to-face interview.[11] The hypotheses $\hat{a} < 0, \hat{c} < 0$ are

[9] To illustrate the computation, the men's figure is calculated as 0.232+0.37x(0.284+0.119).
[10] Computed in the case of men as 0.771+0.66x0.573.
[11] To compare results between the two outcomes, I still include the variable for "others present" among the controls. It is still possible that others could influence even the self-completion responses.

supported again, consistent with the literature on unemployment, insecurity and health outcomes. Also, the hypothesis $\hat{b} > 0$ is again confirmed. Using the preferred fixed effects estimates, the effects again appear large. Compared with being in a secure job mental health for "no-hopers" is lowered by 5.02 for men and 4.96 for women, in each case just under a third of the standard deviation of mental health. But for those 100% confident of finding a job within a year the lowering of mental health is 2.47 (= 5.021-2.556) for men and only a statistically insignificant 0.86 for women.

Among the employed, the baseline negative impact of a 100% fear of job loss is 3.93 for men and significantly smaller at 1.33 for women. While the interaction term also has a negative point estimate in all three models, it is statistically significant only in the case of women. Moreover, for neither sex is there any separate effect of re-employment difficulty upon mental health.

Finally, the effects of 100% job insecurity are again comparable with the effects of unemployment. Relative to a highly employable man in a secure job, the unemployment man with average employability has 3.33 lower mental health (2.26 for a woman); while the 100% job insecure man with average employability has 4.05 lower mental health (2.10 for a woman).

Some previous studies have found that the effects of unemployment or insecurity are greater for men than for women (e.g. Clark, 2003; Theodossiou, 1998). Here, it may be observed that the point estimates for the negative impact on life satisfaction of either unemployment or insecurity are greater for men. However, none of these gender differences are statistically significant at the 5% level. In contrast with the previous studies, one cannot reject the hypothesis that women and men in Australia react in the same way to unemployment and insecurity.

b) Robustness tests.

In addition to the three models presented above, I carried out three types of sensitivity analysis on the core findings, available on request in a separate results file. First, I estimated separate models for employees and unemployed people. This method allows the control variables to take on different parameter estimates. It facilitates additional tests of the core hypotheses $\hat{b} > 0, \hat{c} < 0, \hat{d} < 0, \hat{e} < 0$ under the assumption of varying parameters across the

labour market states. The tests gave broadly the same conclusions as in the full model, in most cases with only small alterations in the estimates. One difference is that, among women the impacts of employability on life satisfaction ($\hat{b}$ and $\hat{d} < 0, \hat{e} < 0$), while significant in the random effects specification, were insignificant in the fixed effects specification.

Second, I added industry dummy variables to the controls. These were found to be largely insignificant, and to make no substantive difference to the core parameter estimates.

Third, in deriving the estimating model it was in effect assumed that $(w-\theta)$ was the same across individuals. However, in practice it will differ, even though we have no direct measures of how. An alternative assumption is that $(w-\theta)$ is proportional to wages, that is, that the potential cost of job loss is greater for those on higher wages, which has an obvious intuitive appeal. Against this, those on lower wages might be less likely to get any job at all in the period, and to feel the impact of lower wages more keenly, contrary to the simplifying linearity assumption in the current specification. Nevertheless, to test the alternative assumption an alternative derivation of the interaction term was deployed, defining it as the 3-way product of the probability of job loss, the probability of not regaining as good a job, and pay. With this derivation, it is found that the findings on most variables are not substantially changed. The estimated coefficient of the newly defined interaction term is negative as predicted in all cases, but in some cases is not statistically significant.

c) Extensions

Besides gender, the results so far have assumed that the impacts of employability and insecurity are similar for different groups of workers. Yet divisions by other exogenous categories are also of potential interest. Earlier studies have reported that unemployment has less of an impact on well-being among younger workers (Pichler, 2006; Clark and Oswald, 1994). Pichler hypothesises that young people are less influenced by material issues than older workers. Insecurity is also found to have a stronger effect on older employees (Cheng and Chan, 2008).

These findings could be seen as consistent with the framework in equation (1). If younger workers are more employable, and could more easily find another job when made redundant, they would be expected to suffer less than older workers from unemployment or from job insecurity. Among the HILDA sample utilised in Table 2, older workers perceive themselves

to be rather less employable than younger workers. Among employees the mean perceived probability of finding as good a job as the current one is 70.9% for those under 35, but only 60.3% for those of 35 or over; among the unemployed, employability is 72.3% for the young, only 55.3% for the old.

Table 4 presents summary results for the estimated parameters on unemployment, employability and insecurity according to age and education. The first thing to note is that, while the point estimates of the impacts of unemployment and of employability on well-being (either life satisfaction or mental health) are mostly greater for old than for young workers, the differences are nowhere statistically significant. Second, the point estimate of the effect of the probability of job loss on well-being does vary between young and old, but in no systematic way: in some cases the baseline effect of Probability of Job Loss is greater for old workers while the interaction effect is greater for young workers; in other cases it is the other way around. At the mean employability levels the differences between older and younger workers in this respect are rather small. In short, the findings imply that there may be no intrinsic reason for age in itself to moderate the impact of insecurity and unemployment on well-being, though it is important to account for the effects of employability.

Similarly, differentiation in the effects of unemployment and insecurity have also been advanced in respect of prior education levels (Oswald and Clark, 1994; Sverke and Hellgren, 2002). Table 4b shows the effects, divided up according to whether highest education was at least Year 12. Among men the base negative impact of unemployment on life satisfaction is greater for the less educated. However, for both sexes the impact of employability among the unemployed is significantly stronger among the low than among the high educated. At the mean level of employability, there are no well-being differences between the high and low educated. New hypotheses are required to account for these differences in the employability effects. One highly speculative explanation could be that more educated workers, who are in a minority among the unemployed, are more likely to find alternative activities and hence react less strongly to changes in the chances of finding a job.

A further extension was to test for the presence of unemployment "scarring", whereby well-being is affected by previous unemployment, a conclusion drawn from analyses of German data (Clark et al., 2001). In part, it is claimed, this could be due to an association between past unemployment and the expectations of future employment (Knabe and Rätzel , 2008). I included a term for whether the individual had been unemployed in either of the previous two waves, using the fixed effects model. The findings are that there is no evidence of any

scarring for women in Australia, using either of the outcome variables, life satisfaction or mental health; while for men there is some evidence of scarring in that past unemployment reduces life satisfaction by 0.120 (s.e. = 0.052). The latter effect is reduced (insignificantly) to 0.095 (s.e.=0.052) when the insecurity and employability terms are included. However, for men there is no evidence of significant scarring on mental health. I conclude that unemployment scarring is a less important phenomenon in Australia than in Germany.

Conclusions.

Football management is a precarious job. However, this did not seem to concern Scolari, even though he may have been feeling quite insecure while his team's performances were below expectations.[12] Scolari's lack of worry appears to exemplify one of the key findings of the model and findings that I have presented, in which employability modifies the impact of job insecurity and unemployment. The estimates imply that, in general:

- Employability does matter for the unemployed: an increase in employability raises both life satisfaction and mental health, each by substantial fractions of the respective standard deviations
- Employability also matters for employees. Even where there is no job insecurity, more employable persons have lower life satisfaction, though there is no significant effect on mental health in this circumstance.
- Previous studies showing a negative impact of job insecurity are confirmed: I find that job insecurity substantially lowers both life satisfaction and mental health among both sexes.
- Job insecurity has a significantly greater effect on men's life satisfaction and on women's mental health, however, when it is combined with low employability.
- Taken account of these interactions the effects of extreme job insecurity and of unemployment are large and of comparable magnitudes. To illustrate, for a man with average employability, 100% job insecurity lowers life satisfaction by 0.38, while becoming unemployed but retaining average employability, lowers life satisfaction by 0.39. This impact is more than one quarter of the standard deviation of life

satisfaction. The estimated impacts are notably higher for the case where employability is low, and for the extreme case of unemployed "no-hopers" the detrimental effect spans more than a half of the standard deviation of life satisfaction and just under a third of the standard deviation of mental health.

Future research based on the same model of interacting transition risks could investigate the magnitude of the effects of insecurity and employability on consumer spending, marital dissolution and other outcomes. There are also certain limitations to the analysis that could be addressed in future research. The potential impact of failing to find another job has not been modelled precisely, owing to lack of suitable data, nor has the impact of variable benefit support during a period of unemployment. Also, while time-invariant effects have been controlled for it remains possible that there are other time-varying variables associated with both expectations and well-being, and that there could be some reverse causation whereby well-being affects both unemployment and subjective expectations of labour market transitions. To acquire yet more confidence in these findings, one would need available some robust instrumental variables affecting insecurity and unemployment status. It is also possible that other indicators of insecurity, apart from subjective transition probabilities, might better capture the putative psychological effects.

The findings are relevant to an evaluation of "flexicurity" and similar policies around the world in which the aim is to boost the efficiency of the labour market by, on the one hand, removing protections against job loss and, on the other hand, improving support for the unemployed to get back into work and with lower cost. In terms of the framework here, one can thus think of these policies as raising ρ, while also raising η and μ. The policies thus raise the well-being of outsiders, but the impact on that of insiders depends on the relative changes in the transition probabilities and on the parameters. In a general equilibrium, a rise in the probability of job loss would affect the employability of both the unemployed and the employed, as well as the unemployment rate itself. To compute the full effects these inter-dependencies would need to be modelled. Nevertheless, it is informative to deduce the terms of a partial-equilibrium trade-off between higher ρ and higher η and μ, using the fixed effects estimates of the impact on life satisfaction from Table 2. I make the assumptions that the unemployment rate is 10%, and that the mean values of ρ and μ are as given in Table 1,

[12] Scolari did lose his job at Chelsea Football Club a month after expressing this sentiment, but within a further few months was appointed as coach for Uzbekistan league and cup champions Bunyodkor, backed by leading regional oil and gas company Zeromax, with a new stadium in production in Tashkent.

and ask: what increase in both η and μ would be required to "compensate", in the sense of leaving well-being unchanged, for raising the perceived probability of job loss ρ from 0.10 to 0.11, i.e. by one percentage point. The answers, in percentage points, are: 1.5 (2.5) for men (women) in the case of life satisfaction, and 12.7 (2.5) in the case of mental health.[13] In other words, from the perspective of life satisfaction, the necessary trade-off seems feasible. This conclusion comes from the large impacts of employability on life satisfaction. The trade-off would be yet more attractive if the policy succeeds in lowering unemployment itself. In terms of mental health, though, the trade-off in employability required for men is quite large; this stems from the relatively low impact of employability on the mental health of employed men relative to the high detrimental impact of job insecurity. However, the estimates here are not all that precisely determined.

The findings also reinforce the value to be gained from improvements in the labour market. Reductions in unemployment have immediate benefits for the unemployed, but there are multiple potential knock-on effects on well-being. Gains follow for the still-unemployed if the fall in the unemployment rate leads them to become more optimistic about their chances of getting a job. Similarly, employees benefit if the improving labour market reduces the fear of job loss and also improves their employability. Perceptions of job insecurity and employability loosely follow aggregate unemployment rates over the long term and across countries (Green, 2006, 2009). In short, the gains in well-being from falling unemployment are by no means confined to the unemployed who regain employment. These kinds of extension effects also potentially contribute to the multiplier effects from improving or deteriorating labour markets, and offer explanation for the large effects of unemployment on national well-being found in macroeconomic research.

[13] To illustrate for males and life satisfaction: the rise in job insecurity lowers total well-being (of both unemployed and employed) by {0.9 x 0.232x0.01 + 0.9x0.33x0.284x0.01}; while raising well-being by {0.1x0.573z + 0.0x0.10x0.284z + 0.9x0.119z} where z is the increase in employability. Equating these two gives the trade-off.k

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Table 1 Descriptives.

	All		Men		Women	
	Mean	sd	Mean	sd	Mean	sd
Life Satisfaction	7.84	1.41	7.81	1.43	7.86	1.4
Subjective Mental Health	74.58	16.12	75.78	15.66	73.4	16.47
Unemployed	0.06	0.25	0.07	0.25	0.06	0.24
Employability (of the unemployed)	0.66	0.3	0.66	0.31	0.66	0.3
Probability of job loss	0.1	0.21	0.11	0.21	0.09	0.2
Probability of not finding as good a job	0.35	0.33	0.37	0.34	0.33	0.33
Probability of both the above	0.04	0.10	0.04	0.11	0.03	0.10
Pay (gross weekly, A$)	719.83	586.07	869.01	674.16	567.7	429.49
HH Income (A$000s)‡	23.06	23.24	27.38	26.61	18.65	18.17
Age	36.11	12.79	36.08	12.88	36.15	12.69
Age Squared	1467.66	968.29	1467.74	986.01	1467.59	949.9
Married	0.6	0.49	0.61	0.49	0.59	0.49
No. of children <=14	0.7	1.05	0.67	0.99	0.68	1.02
Regional Australia	0.33	0.47	0.32	0.47	0.33	0.47
Remote Australia	0.02	0.14	0.02	0.14	0.02	0.14
Long-Term Health Condition or Disability	0.13	0.34	0.13	0.34	0.13	0.34
Other adult present at interview	0.34	0.47	0.37	0.48	0.31	0.46

Note: The sample is that used for the analyses in Table 3 below, with 49,147 person-year observations. It is not representative of the Australian population in any one year. The means are unweighted.
‡ Equivalised per capita annual household income.

Table 2 Employability, Employment Security and Life Satisfaction

	(1)	(2)	(3)	(4)	(5)	(6)
		Males			Females	
	re	re	fe	re	re	fe
Unemployed	-0.964***	-0.932***	-0.771***	-0.743***	-0.517***	-0.568***
	(0.0790)	(0.0932)	(0.0967)	(0.0795)	(0.0924)	(0.0972)
Employability if Unemployed	0.752***	0.755***	0.573***	0.543***	0.348***	0.445***
	(0.101)	(0.119)	(0.119)	(0.103)	(0.120)	(0.121)
Probability of Job Loss	-0.319***	-0.190***	-0.232***	-0.350***	-0.344***	-0.247***
	(0.0515)	(0.0565)	(0.0552)	(0.0529)	(0.0595)	(0.0567)
INTER †	-0.363***	-0.471***	-0.284***	-0.224**	-0.193	-0.149
	(0.103)	(0.111)	(0.110)	(0.114)	(0.126)	(0.123)
Re-employment Difficulty † †	-0.122***	-0.0870***	-0.119***	-0.0731***	-0.0753**	-0.0525*
	(0.0287)	(0.0311)	(0.0317)	(0.0281)	(0.0306)	(0.0311)
HH Income ($000s)‡	0.000508	0.000666	0.000312	0.00128**	0.00125*	0.00142*
	(0.000399)	(0.000415)	(0.000472)	(0.000608)	(0.000658)	(0.000736)
Age	-0.136***	-0.125***	-0.149***	-0.0922***	-0.0863***	-0.100***
	(0.00601)	(0.00688)	(0.0125)	(0.00613)	(0.00704)	(0.0128)
Age squared	0.00167***	0.00150***	0.00147***	0.00117***	0.00103***	0.00108***
	(7.66e-05)	(8.51e-05)	(0.000153)	(8.06e-05)	(9.06e-05)	(0.000156)
Highest Education Level		-0.0218***			-0.0162***	
		(0.00654)			(0.00574)	
Extroversion		0.126***			0.0627***	
		(0.0170)			(0.0149)	
Agreeableness		0.185***			0.134***	
		(0.0201)			(0.0210)	
Conscientiousness		0.0927***			0.0587***	
		(0.0183)			(0.0167)	
Emotional stability		0.161***			0.204***	
		(0.0171)			(0.0168)	
Openness to experience		-0.0973***			-0.0567***	
		(0.0182)			(0.0167)	
Married/Co-habiting	0.442***	0.394***	0.392***	0.367***	0.363***	0.279***
	(0.0264)	(0.0297)	(0.0335)	(0.0245)	(0.0275)	(0.0330)
No. of children <=14	0.0446***	0.0453***	0.0559***	0.0111	-0.00301	0.0155
	(0.0113)	(0.0123)	(0.0151)	(0.0120)	(0.0132)	(0.0169)
Regional Australia ‡‡	0.129***	0.104***	0.0786*	0.174***	0.159***	0.0835*
	(0.0269)	(0.0298)	(0.0448)	(0.0269)	(0.0295)	(0.0476)
Remote Australia ‡‡	0.115	0.0587	-0.0348	0.208**	0.188**	-0.0274
	(0.0792)	(0.0884)	(0.112)	(0.0819)	(0.0940)	(0.124)
Long-Term Health Condition	-0.126***	-0.104***	-0.0839***	-0.175***	-0.147***	-0.0696**
	(0.0234)	(0.0251)	(0.0256)	(0.0243)	(0.0263)	(0.0270)
Others Present In Interview	0.0413***	0.0378**	0.0277	0.0621***	0.0419**	0.0426**
	(0.0160)	(0.0174)	(0.0172)	(0.0167)	(0.0184)	(0.0180)
Observations	24813	18610	24813	24334	19009	24334
Number of individuals	6417	3831	6417	6464	4183	6464
R2 within	0.0259	0.0263	0.0266	0.0133	0.0120	0.0140
R2 between	0.0751	0.138	0.0278	0.0609	0.110	0.0311
R2 overall	0.0986	0.202	0.0374	0.0844	0.156	0.0354

The regressions also include a constant and year dummies; † Product of "Probability of job loss" and "If job lost, probability of not regaining as good a job"; † † If job lost, probability of not regaining as good a job; ‡ Equivalised per capita annual household income; ‡‡: Reference category: Major city; *, ** and *** indicate 10%, 5% and 1% statistical significance.

Table 3 Employability, Employment Security and Subjective Mental Health

	(1)	(2)	(3)	(4)	(5)	(6)
		Males			Females	
	re	re	fe	re	re	fe
Unemployed	-8.037***	-5.955***	-5.021***	-8.422***	-6.927***	-4.963***
	(0.934)	(1.063)	(1.156)	(0.991)	(1.108)	(1.228)
Employability if Unemployed	4.537***	3.306**	2.556*	5.914***	5.097***	4.100***
	(1.190)	(1.362)	(1.427)	(1.279)	(1.441)	(1.528)
Probability of Job Loss	-5.113***	-4.043***	-3.934***	-3.137***	-1.729**	-1.329*
	(0.603)	(0.652)	(0.645)	(0.645)	(0.709)	(0.691)
INTER †	-1.205	-2.250*	-0.297	-2.641*	-4.167***	-2.481*
	(1.201)	(1.282)	(1.281)	(1.385)	(1.494)	(1.494)
Re-employment Difficulty † †	-0.808**	-0.213	-0.00369	-0.599*	-0.130	0.142
	(0.334)	(0.356)	(0.371)	(0.341)	(0.364)	(0.378)
HH Income ($000s)‡	0.0202***	0.0156***	0.00592	0.0325***	0.0212***	0.00569
	(0.00488)	(0.00505)	(0.00592)	(0.00735)	(0.00776)	(0.00889)
Age	-0.624***	-0.536***	-0.387***	-0.218***	-0.281***	0.0228
	(0.0686)	(0.0745)	(0.147)	(0.0739)	(0.0817)	(0.156)
Age squared	0.00842***	0.00675***	0.00486***	0.00422***	0.00367***	0.00107
	(0.000870)	(0.000920)	(0.00178)	(0.000971)	(0.00105)	(0.00190)
Highest Education Level		0.00148			0.104	
		(0.0703)			(0.0665)	
Extroversion		1.873***			1.335***	
		(0.178)			(0.171)	
Agreeableness		1.063***			0.532**	
		(0.210)			(0.241)	
Conscientiousness		1.102***			0.693***	
		(0.191)			(0.192)	
Emotional stability		4.303***			4.753***	
		(0.180)			(0.192)	
Openness to experience		-0.689***			-0.728***	
		(0.191)			(0.192)	
Married/Co-habiting	2.664***	2.279***	1.874***	1.609***	1.631***	0.740*
	(0.309)	(0.334)	(0.401)	(0.299)	(0.324)	(0.407)
No. of children <=14	0.114	0.123	0.216	0.0697	-0.154	-0.0848
	(0.130)	(0.137)	(0.177)	(0.146)	(0.155)	(0.208)
Regional Australia‡‡	0.548*	0.547*	-0.0351	1.851***	1.849***	1.536***
	(0.308)	(0.325)	(0.531)	(0.325)	(0.343)	(0.585)
Remote Australia‡‡	0.840	-0.0220	0.367	2.534**	1.709	1.782
	(0.931)	(0.989)	(1.362)	(1.025)	(1.107)	(1.584)
Long-Term Health Condition	-2.342***	-2.243***	-0.931***	-3.364***	-3.285***	-1.503***
	(0.270)	(0.286)	(0.296)	(0.294)	(0.311)	(0.327)
jOthers Present In Interview	0.731***	0.674***	0.804***	0.331	0.418*	0.329
	(0.186)	(0.200)	(0.200)	(0.202)	(0.218)	(0.218)
Observations	22091	17615	22091	22329	18165	22329
Number of individuals	6012	3804	6012	6202	4150	6202
R2 within	0.0101	0.0103	0.0111	0.00495	0.00564	0.00548
R2 between	0.0813	0.288	0.0679	0.0873	0.260	0.0600
R2 overall	0.0603	0.198	0.0507	0.0578	0.176	0.0415

The regressions also include a constant and year dummies; † Product of "Probability of job loss" and "If job lost, probability of not regaining as good a job"; † † If job lost, probability of not regaining as good a job; ‡ Equivalised per capita annual household income; ‡‡: Reference category: Major city; *, ** and *** indicate 10%, 5% and 1% statistical significance.

Table 4a Differential Effects According to Age

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Life Satisfaction				Mental Health			
	Males	Males	Females	Females	Males	Males	Females	Females
	<35	>=35	<35	>=35	<35	>=35	<35	>=35
Unemployed	-0.693***	-0.888***	-0.497***	-0.583***	-3.867**	-5.133***	-6.362***	-3.953**
	(0.148)	(0.131)	(0.141)	(0.139)	(1.900)	(1.486)	(1.923)	(1.641)
Employability for the Unemployed	0.505***	0.698***	0.391**	0.443**	1.828	1.795	5.614**	2.273
	(0.177)	(0.171)	(0.171)	(0.180)	(2.266)	(1.954)	(2.327)	(2.130)
Probability of Job Loss	-0.259***	-0.150**	-0.318***	-0.172**	-2.726**	-4.407***	-2.968***	-0.717
	(0.0860)	(0.0742)	(0.0862)	(0.0782)	(1.062)	(0.833)	(1.112)	(0.910)
INTER †	-0.266	-0.392***	-0.108	-0.213	-5.103**	1.159	1.702	-3.737**
	(0.206)	(0.133)	(0.221)	(0.154)	(2.555)	(1.494)	(2.893)	(1.784)
Re-employment Difficulty † †	-0.108**	-0.130***	-0.0307	-0.0676*	-0.353	0.323	-0.871	0.574
	(0.0511)	(0.0410)	(0.0514)	(0.0402)	(0.635)	(0.463)	(0.665)	(0.466)
Observations	11762	13051	11097	13237	10036	12055	9952	12377
Number of individuals	0.0530	0.0347	0.0433	0.0356	0.0459	0.0471	0.0421	0.0361
R2 within	0.0297	0.0288	0.0168	0.0140	0.0115	0.0132	0.00565	0.00764
R2 between	0.0646	0.0410	0.0551	0.0445	0.0561	0.0614	0.0510	0.0536
R2 overall	3667	3255	3610	3349	3372	3106	3421	3241

The regressions include the same variables as for Tables 2 and 3; † Product of "Probability of job loss" and "If job lost, probability of not regaining as good a job"; † † If job lost, probability of not regaining as good a job; *, ** and *** indicate 10%, 5% and 1% statistical significance.

Table 4b. Differential Well-Being Effects According to Education.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Life Satisfaction				Mental Health			
	Males	Males	Females	Females	Males	Males	Females	Females
	Low Ed.	High Ed.	Low Ed.	High Ed.	Low Ed.	High Ed.	Low Ed.	High Ed.
Unemployed	-0.939***	-0.548***	-0.568***	-0.377**	-4.933***	-5.286***	-6.469***	-3.184
	(0.140)	(0.140)	(0.129)	(0.163)	(1.629)	(1.706)	(1.606)	(2.041)
Employability for the Unemployed	0.806***	0.252	0.523***	0.0870	2.806	2.015	6.539***	0.727
	(0.170)	(0.175)	(0.161)	(0.203)	(1.986)	(2.131)	(1.993)	(2.551)
Probability of Job Loss	-0.264***	-0.225***	-0.0685	-0.331***	-3.981***	-4.166***	-2.484**	-0.755
	(0.0908)	(0.0697)	(0.0912)	(0.0738)	(1.029)	(0.839)	(1.101)	(0.909)
INTER †	-0.473***	-0.0801	-0.323*	-0.126	-0.965	0.716	-1.468	-3.149
	(0.179)	(0.140)	(0.190)	(0.164)	(2.026)	(1.671)	(2.252)	(2.032)
Re-employment Difficulty	-0.116**	-0.119***	0.00425	-0.103**	-0.439	0.233	0.220	-0.000894
† †	(0.0505)	(0.0409)	(0.0467)	(0.0423)	(0.577)	(0.492)	(0.556)	(0.522)
Observations	11057	13750	12047	12286	9603	12485	10976	11353
Number of individuals	0.0432	0.0153	0.0224	0.0387	0.0364	0.0435	0.0477	0.0184
R2 within	0.0544	0.0174	0.0264	0.0439	0.0446	0.0537	0.0562	0.0308
R2 between	3356	3391	3795	3189	3097	3209	3598	3088
R2 overall	0.0324	0.0220	0.0145	0.0147	0.0132	0.0112	0.00903	0.00572

The regressions include the same variables as for Tables 2 and 3; † Product of "Probability of job loss" and "If job lost, probability of not regaining as good a job"; † † If job lost, probability of not regaining as good a job; *, ** and *** indicate 10%, 5% and 1% statistical significance.