Insecurity, Wellbeing and Job Flexibility.*

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Abstract

The potential effects of the movement away from traditional full-time permanent employment has generated a large literature. Evidence has been mixed but suggests job security is a key determinant of flexible employment well-being. Increased flexibility implies a greater frequency of transitions between employment and unemployment. It has yet to be determined how these new patterns of work affect the wellbeing of workers. This paper provides the first evidence of a prolonged scarring effect of past unemployment on worker wellbeing. In addition, our evidence suggests that flexible employment workers may become habituated to the experience of unemployment. However, we demonstrate that actual and perceived job security is a strong driver of variations in flexible workers wellbeing. Finally, flexible employment has other consequences, in particular it is associated with increased financial difficulties that significantly reduce wellbeing.

JEL Classification: J28, I31

Keywords: Life satisfaction, Unemployment, Scarring, Habituation, Flexible Employment.

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1 Introduction

The prevalence of flexible employment contracts has grown markedly in many OECD countries (Bradley et al 2003, Booth et al 2002, Gagliarducci 2005). One manifestation of this is the move in some countries from job security as a policy aim to employment security, the so-called 'flexicurity' model (European Commission 2007), which envisages multiple flexible employment contracts across the working life. An implication of this model is that individuals are more likely to experience more frequent transitions between unemployment and employment. A concern is that for some, these more flexible and insecure work histories can consist of unemployment interspersed with periods of employment in poor quality jobs; this has been characterized as a process of social exclusion (Bradley et al 2003). It is timely to ask what impact such employment experiences will have on workers' wellbeing in the longer term.

Existing evidence on the effect of flexible employment on wellbeing has focused almost entirely on one dimension, job satisfaction. Earlier research suggested that flexible working contracts were associated with lower levels of job satisfaction (Booth et al 2002). More recent research suggests that these subjective differences in overall job satisfaction can be compensated in part by other characteristics of employment (Green and Heywood forthcoming). Nevertheless, there appears to be growing evidence that a relative dissatisfaction with a lack of job security is a key concern for flexible contract workers (Theodossiou and Vasileiou 2007, Green and Heywood forthcoming, Origo and Pagani 2009). The flexicurity model offers lower job security but aims to provide increased employment security. Is there some compensation for workers in an employment security model to offset the decline in job security? To answer this question requires an examination of workers' overall life satisfaction rather than consideration of job satisfaction alone and a wider perspective than current employment experience.

Previous research has established that life satisfaction is lower for the unemployed compared to the employed, above and beyond any loss in income (Clark and Oswald 1994, Winkelmann and Winkelmann 1998, Frey and Stutzer 2002, Carroll 2007). However, to assess the implications of the more flexible patterns of work history requires more than a purely contemporaneous comparisons of satisfaction.[1] There is evidence that past unemployment affects current life satisfaction, this identifies the possibility of both scarring and habituation effects. For the employed, Clark, Georgellis and Sanfey (2001) provide evidence, using German

[1] This limitation in comparing contemparaneous life satisfaction and feelings of insecurity amongst temporary workers and permanent workers has been previously noted in the social psychology literature by Silla et al (2005).

data, of a scarring effect from past unemployment insofar as it reduces current life satisfaction. However, for those currently unemployed, the amount of unemployment experienced in the last three years had less impact on life satisfaction. They suggest that this reflects individuals' habituation to the experience of unemployment. However, more recent evidence examining three European countries failed to find support for this habituation hypothesis (Clark 2006). In this paper we examine how the life satisfaction of workers' in less secure employment is affected by their previous unemployment experiences and how this differs from those in more secure employment.

We utilise data from the Australian labour market, which has had a long tradition of extensive use of relatively insecure employment to assess how the accumulation of unemployment for those in flexible employment affects life satisfaction. Is it the case that the marginal disutility of increased unemployment is diminishing in accordance with habituation effects or for these workers do accumulated unemployment periods increase feelings of insecurity and lower wellbeing? In addition, we examine further evidence on how wellbeing is related to job insecurity and how this differs between workers in permanent and flexible employment. While there are numerous ways through which flexible employment may influence worker wellbeing, we focus on three potentially important and inter-related factors for which our data is particularly advantageous. First, by construction the instability of employment represents the key defining element of non-permanent employment. We know that workers in flexible employment feel less secure (Clark and Postel-Vinay 2009) and for workers who experience more feelings of insecurity there is an adverse impact on job and life satisfaction (Green 2009). Perceptions of just how insecure any given contractual arrangement is will be influenced by both past experiences and the perceived stability of current employment. As a result, we investigate how the length of time in the current employment spell impacts on wellbeing for different contract types. We then address perceived susceptibility to future episodes of unstable employment by examining the concern these workers feel about being fired from their current job and their employment prospects over the coming year compared to other workers and its impact on wellbeing.

A second related point is that employment conditions can influence perceptions of job security, for instance Borland (2002) demonstrates how perceived job security fluctuates pro-cyclically. We investigate this using variations in the performance of regional (state) labour markets in Australia. Clark (2003) reported that the unemployed experienced higher wellbeing when the regional unemployment rate was higher, which

is attributed to the unemployed taking other unemployed people in the region as a reference group and experiencing a positive externality from their unemployment. The current state of the regional economy will influence feelings about past unemployment but the mechanism will be different given that it is not a contemporaneous relationship between unemployment experiences and wellbeing that we are examining. Specifically, it might be expected that in a stronger regional economy, a currently employed individual should feel relatively better about past unemployment compared to the same individual in a region where the economy is weaker. The latter may experience increased feelings of vulnerability about future employment prospects, which will be higher for those that have experienced more unemployment in the past.

Finally, the combination of past and potential future instability in employment can generate other circumstances that impact on wellbeing. In particular, flexible workers may find they are less able to manage debt and financial institutions will be less willing to offer them credit. As a result, past and future unstable employment may affect worker wellbeing through the channel of financial stress. This potential indirect effect of unstable employment histories would be an additional source of reduction in wellbeing. Understanding these further dimensions of how flexible employment affects worker wellbeing is critical to evaluating how workers may respond behaviourally to the extended use of flexible labour markets, and to changes in economic conditions.

The data used is a longitudinal panel related to casual and permanent employees in Australia for the period 2001 to 2008. Australia provides a particularly appropriate market to examine the potential effects of flexicurity type arrangements due to the relatively high incidence and prolonged use of flexible employment contracts. To briefly summarise our results, we provide evidence that all employees are scarred by the amount of previous unemployment experienced in their working lives; this is the first evidence of the prolonged nature of scarring effects associated with unemployment. We also find some evidence to suggest flexible workers become more habituated to this experience. However, the main factor driving flexible worker wellbeing is their perception of job security. Longer tenure in employment leads to a marked reduction in the negative impact of flexible employment on wellbeing as it is associated with increasingly positive views of future employment prospects and a reduced expectation of being sacked. Insecurity from unstable employment patterns affects broader aspects of flexible workers' lives, we provide evidence that flexible workers suffer greater financial difficulties and that these have a significant negative effect on their wellbeing.

The rest of the paper is set out as follows. The following section provides an overview of the data and methodology used, this is followed by the presentation and discussion of the results. The final section provides a conclusion and discussion.

2 Data and Methodology

2.1 Data

The data used in this analysis is taken from the first 8 waves (2001-2008) of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. HILDA is a household based panel survey that closely follows the British Household Panel Survey (BHPS) and the German Socioeconomic Panel (GSOEP) in structure. HILDA records data on an individual's work history. The specific variable that is used in the empirical work detailing work histories is the response to a question covering how many years and months have been spent in unemployment *and* looking for work (the individual does not have to be receiving unemployment benefits to be classified as unemployed). HILDA contains detailed information on life satisfaction. Respondents are asked to choose a number on a Likert scale ranging between 0 and 10 to indicate their levels of satisfaction. The specific question that individuals are asked is "How satisfied are you with your life?" Socio-demographic data includes wage, age, part-time employment, whether living as a couple, health status, number of years in formal education, industry, occupation, public sector employment, geographic region and if the household has paid off a mortgage. These eight waves yield a total of 72,204 observations, of which 43,339 or 60.1% state their employment status as being employees aged between 15 and 64. Of this group, 21,916 or 50.5% are males and 21,483 or 49.5% are female. For females, selection problems into flexible employment, and employment in general, are likely to be more acute. For instance, flexible work is more likely to represent a means of balancing work and family commitments for women (Booth and van Ours 2008), which makes disentangling the effects of work histories on current life satisfaction more difficult. Hence, we use only male employees in the empirical work. This leaves an unbalanced panel, encompassing 17,621 person year observations, once we account for inconsistencies in the data and removing individuals with incomplete answers and those with multiple jobs.

The main form of flexible employment contract in Australia is casual employment. Casual employment is a legally recognized state where workers have no entitlement to sick or holiday leave. Unlike temporary

employment contracts in many European countries, there are no maximum periods of employment for casual work in Australia. There is some correlation between part-time work and casual employment, but many casual employees work full-time hours. For instance, approximately 32% of casuals in 1998 worked 30 or more hours a week (ABS 2007).

There are well known difficulties with categorizing employment contract types in Australia (Murtough and Waite 2000, Wooden and Warren 2004) insofar as the definition of casual employment created by the Australian Bureau of Statistics may also include individuals on fixed term contracts. The ABS definition (as reported in the HILDA Survey) leaves no scope for fixed-term contracts. An employee is either employed on a casual or permanent basis. Rather than use these definitions we rely upon individual responses on employment contract type in HILDA. Specifically we only categorize individuals as in casual employment if they report working in non-permanent employment and do not have any sick or holiday leave entitlements. In the case where an individual is in non-permanent employment but has holiday and sick leave entitlement, these are categorized as fixed term contracted workers. As might be expected, there are some differences in the numbers of casual employees this approach produces when compared to the standard ABS classification.[2]

INSERT TABLE 1 HERE

In Table 1 we present summary statistics for the variables used in the empirical work. We observe that casuals are less satisfied than their permanent counterparts. In general, casuals are paid less on an hourly basis; have experienced more unemployment and less employment; are younger; are over represented in part-time employment; have less education; are less likely to be living in a capital city; and are less likely to be working in the public sector or as a skilled worker. Responses to three related questions are reported in Table 1, the probability of quitting, the probability of getting fired and satisfaction with employment opportunities. The former two variables are responses ranging between 0 and 100 and the latter is an ordered response (0 - 10) that is converted into a continuous variable using the same procedure for the life satisfaction (described below). Casual workers perceive their chances of being sacked or quitting as roughly twice as high on average in comparison to permanent workers. Finally, information on financial stability is reported, namely how often does the individual pay of credit balances (on a monthly basis) and whether the individual has had to seek financial help from friends or family. The former variable is ordinal ranging from values of 1 (pays off

[2]It should be noted that our main results are robust to the choice of casual employment classification.

balances hardly ever) to 5 (pays off balances always). The summary statistics demonstrate that permanent workers find it easier to pay off their credit card balances and are over fifty per cent less likely to call on friends or family for financial help (the differences are both statistically significant at the 1% level)

2.2 Methodology

The well-being (W) function of individual i at time t can be expressed as:

$$W_{it} = W(\{u_{it-1....}u_{it-j}\}, X_{it}) \tag{1}$$

where $\{u_{t-1....}u_{t-j}\}$ is the record of past unemployment experiences since entering the labour force and $\boldsymbol{X}$ is a vector of individual characteristics.

Satisfaction variables have traditionally been examined using ordered probit models, reflecting the ordinal nature of the dependent variable. We have a panel data set and want to take advantage of its longitudinal element. Van Praag and Ferrer-i-Carbonell (2004) developed a procedure that consists in deriving Z values of a standard normal distribution that are associated with the cumulative frequencies of the different k categories of an ordinal dependent variable. Then the expectation of a standard normally distributed variable is taken for an interval between those two Z values that correspond to the class of the value of the original variable. Thus if the true unobserved continuous variable is W^* where the observed $W_i = j$ if $\mu_{j-1} < W_i^* < \mu_j$ for $j = 1, 2..k$ then the conditional expectation of the latent variable is given by:

$$\overline{W_i} = E(W_i^*/\mu_{j-1} < W_i^* < \mu_j) = \frac{n(\mu_{j-1}) - n(\mu_j)}{N(\mu_j) - N(\mu_{j-1})} = \frac{n(\mu_{j-1}) - n(\mu_j)}{p_j} \tag{2}$$

where n is the standard normal density and $p_j = N(\mu_j) - N(\mu_{j-1}), j = 1, ...k-1$. This approach allows the application of a linear model and has been termed Probit (OLS) or POLS. With longitudinal data the POLS method allows for the inclusion of individual level fixed or random effects.

Workers previous unemployment experience is the total amount of unemployment in individual $i's$ work history, $\sum_{n=1}^{n=j}\{u_{t-n}\}$. Rather than linearise the effect of unemployment histories on well-being we use this to create five categories of unemployment experience.[3] These are (a) those who have experienced some

[3] Estimates using a linear form of unemployment experience are discussed in the results.

unemployment but less than six months $U1$ (b) between six months and one year of unemployment $U2$ (c) between one and two years of unemployment $U3$ (d) between two and four years of unemployment $U4$ and (d) four or more years of unemployment $U5$.

Thus the first estimating equation used in the sections that follow is of the form:

$$\overline{W}_{it} = \phi + \beta \mathbf{U}_{it} + \gamma \mathbf{X}_{it} + \delta Cas_{it} + \alpha_i + \mu_t + \varepsilon_{it} \tag{3}$$

this is a random effects model where $\mathbf{U}_{it}$ is the vector of unemployment category dummies. X is a vector of personal characteristics as described above; Cas is a dummy variable indicating whether the individual is a casual employee or not to capture contemporaneous differences in well-being not associated with observable characteristics; α_i are individual intercepts, μ_t represents time-varying characteristics for an individual year that affect all individuals and ε_{it} is an iid error term. If there is decreasing marginal disutility then the coefficients on the higher categories of unemployment should display less incremental influence on current well-being than coefficients in the lower categories. This is our first main estimating equation (Model I). Hausman tests are used to determine if the random effects assumptions are maintained in the estimated equations.[4] In order to examine if a certain level of past unemployment has a differing impact on casual workers compared to permanent workers, we interact each unemployment category with our casual worker dummy. These extra terms will identify variations across contract type conditional on unemployment history. We denote this as Model II in the tables of estimates.

Employees in insecure employment may not be a random sample of all employees. Of particular concern is that individuals who are less affected by unemployment may be more likely to take insecure employment. If this selectivity occurs then any estimates of scarring effects obtained will be upwardly biased for casual employees. Hence, any difference in the impact of past unemployment on well-being would be an upper bound estimate, which leads to problems inferring if there are substantive differences in scarring and habituation effects between secure and insecure contracts. We explore the possibility for selection to bias our estimates in the empirical work.

[4] Alternatively, we could estimate this model incorporating an individual fixed effect. However, there is insufficient change in the past duration of unemployment experience within sample to properly identify this model with our data.

3 Results

3.1 Scarring and Habituation Effects

In Table 2 we present summary evidence of the relationship between wellbeing and unemployment. Of those workers who have experienced at least some unemployment then the average unemployment duration for casuals is greater than permanent workers and the level of wellbeing lower. For workers who have experienced no unemployment then levels of wellbeing are indistinguishable. Our main interest is in how this wellbeing changes across the duration of past unemployment ($U_1 - U_5$). For permanent employees over 40% have experienced unemployment of less than six months and 15% have experienced unemployment of more than two years. The comparable figures for casuals are 30% and 31% respectively. Permanent employee wellbeing is nearly constant for unemployment histories of up to two years and then declines thereafter. Casuals' wellbeing decreases for unemployment categories $U_1 - U_3$ (up to a total of two years) and then shows no further signs of decline. These rather contrasting patterns provide some preliminary evidence to suggest that scarring and habituation effects may differ across contract types. Casuals who have experienced up to six months unemployment report greater levels of well-being than their permanent counterparts, which is in contrast to the general picture of lower wellbeing. This may be indicative of the satisfaction derived from a relatively higher degree of employment continuity for workers in flexible employment.

INSERT TABLE 2 HERE

The estimates from equation (3) are reported in Table 3. The casual dummy variable is negative and significant indicating a lower level of life satisfaction conditional on observables. We observe increases in life satisfaction associated with increased hourly wages, the positive effect of income on life satisfaction is a standard finding in previous empirical research (Frey and Stutzer 2002, Blanchflower and Oswald 2004). The Hausman test indicates that the random effects assumptions are maintained. The categorical unemployment history variables suggest increasing marginal disutility when unemployment increases from between 0 - 0.5 yrs (U_1) to the range 0.5 - 1.0 yrs (U_2), then well-being remains negative but stable as total unemployment history increase beyond two years. Next we include the interaction terms between casual and unemployment category and the results are reported in column three. For the first category U_1, the interaction term has a positive effect and the F-test cannot reject the hypothesis that the combined effect of $U_1$and $U_1 * Casual$ is zero at standard levels of significance. Thus, consistent with the evidence in table 2, casual workers who have

experienced up to six months previous unemployment do not experience a statistically significant decline in wellbeing, unlike permanent employees. All workers experience a decline in wellbeing when previous unemployment totals are between six months and two years. Beyond that point casuals suffer no *further* decline in wellbeing, indicative of habituation effects; the F-tests for the U_4 and U_5 category estimates for casuals summing to zero cannot reject the null hypothesis. In contrast, permanent workers with over two years of unemployment history do experience declines in wellbeing.

INSERT TABLE 3 HERE

There are two sources of potential bias that may affect the results in our random effects models by violating the assumption of no correlation between the regressors and random effects. Firstly, those taking up casual work might well be individuals who are by nature less affected by previous spells of unemployment (i.e. selection into contract type). Secondly, individuals with longer durations of unemployment may be inherently different from those with shorter durations (selection into unemployment histories). We examine each of these in turn. To address the first issue we investigate the scarring effects of previous unemployment experience on individuals that are currently unemployed and then subsequently move into casual employment. If casual workers are, as a group, inherently less affected by past unemployment then we would expect to see evidence of habituation effects (or less evidence of scarring) whilst they are in unemployment. In Table 4 we report estimates using the same categorical division of previous unemployment histories as before where the sample is all individuals who were unemployed in Wave 1.

INSERT TABLE 4 HERE

In the second column we report estimates with just the five categories of unemployment histories included. It is evident that once previous unemployment experience extends beyond one year then the unemployed experience a significant decline in wellbeing compared to unemployed individuals with no previous history of unemployment or those with up to one year of previous unemployment. There is no evidence of any systematic increase in scarring as unemployment increases beyond two years. In the next column we interact the unemployment history categories with a variable indicating that in the *next* wave of the survey the individual entered casual employment. This provides an indication of whether those individuals selected into casual employment are those that react differently to past unemployment than other unemployed individuals. Only one of the terms is marginally significant, that for U_1; it appears that the scarring effects of unemployment

are generally present for those who transit to casual employment in much the same way as for others who are unemployed and this is confirmed by the F-tests for the categories of $U3$ and beyond. It could be the case that the individuals who became casual employees in Wave 2 are not a representative sample of all casual employees. This was not evident in their observable characteristics which were all very similar to the averages reported in Table 1 while their unemployment experience (1.01 yrs) is the same as the casual average for that period (0.99 yrs). Nevertheless, we repeated the exercise using individuals who were unemployed in Wave 2 and identified those who became casual employees in Wave 3, the results were the qualitatively the same as those reported in Table 4.

The key concern with respect to unemployment histories is that the wellbeing of casuals and permanent workers differs because of the amount of unemployment experienced in the past. If casuals with longer unemployment histories are different to those with shorter histories and this is not observed in the permanent workforce then any identification of scarring or habituation may be problematical. We estimate fixed effects life satisfaction models for each category of duration of unemployment and include a dummy variable to indicate casual employment as well as controls for other time-varying covariates. These results are reported in the lower panel of Table 4. The main result from these regressions is that the difference between casual and permanent employees in all U categories is not statistically significant. There seems to be no systematic difference between casual and permanent employees wellbeing with equivalent levels of unemployment history conditional on observable time-varying characteristics and unobservable time invariant characteristics. Thus, there seems no clear evidence that across the categories of unemployment history there are no significant changes in the assessment of wellbeing because of change in contract type. Casual work status does not appear to increase the scarring effects of a particular level of previously experienced unemployment but neither does it seem to generate any statistically significant habituation effects. There may be sorting of workers into unemployment history categories but it does not appear that this sorting is clearly defined by the contract of employment in terms of worker's wellbeing.

3.2 Further Estimates

In this section we extend our analysis of sources of insecurity in employment and seek to identify how this impacts on casual workers compared to permanent workers. We focus on three important potentially con-

tributing factors, actual and perceived job security and employment prospects, local labour market conditions and debt and financial stability.

First, we investigate job security and employment prospects among casual workers by utilising a range of information available in HILDA. Specifically, we focus on four related questions, tenure in current employment, probability of quitting, probability of getting fired and satisfaction with employment opportunities, and examine how these vary by contract status. Tenure in employment is an explicit indicator and historical indicator of job security. To investigate the effects of tenure, we split our sample between short (less than two years) and long (greater than two years) tenure in employment. The others are more forward looking and related to worker perceptions. The probability of quitting and getting fired are responses ranging between 0 and 100 and employment prospects is an ordered response ranging between 0 and 10 that is converted into a continuous variable using the same procedure described above for the life satisfaction variable. We investigate how contract type affects responses to this information and perceptions of security. An advantage of this approach is that we can include worker fixed effects so that sorting of workers across contracts by time invariant worker differences can be controlled for.[5] We examine how the increase in tenure affects life satisfaction across contract types and then use each of the other three variables related to job security and employment prospects as a dependent variable in models disaggregated by short and long tenure and otherwise include all of the controls in the previous analyses. These estimates are presented in table 5.

INSERT TABLE 5 HERE

Consistent with prior evidence that job security is important, we find that the relative position of casuals improves as tenure of employment increases, the negative effect of being on a casual employment contract goes to insignificance at tenure over 2 years. Casual employees have a higher probability of quitting and higher perception of getting fired when compared to permanent employees, but both diminish markedly when tenure increases beyond two years and even becomes insignificant in the case of quitting. They are also less satisfied with their employment opportunities, but this difference again diminishes with longer tenure. This suggests that continuity in casual employment is associated with greater wellbeing. This is clearly related to an increasingly favourable perception of the employment situation.[6]

[5] Hence the contract estimates in this model are identified by workers moving between casual and permanent employment, there are 611 movers in total, of which 382 move from casual to permanent employment and 229 move from permanent to casual employment.

[6] The estimations were repeated for the variables indicating quit and fired in a tobit model reflecting the truncated nature of the response variable and the qualatative effects of the changes in the casual variable across tenure categories were the same as

We next examine the impact of regional labour market conditions on these habituation and scarring effects. We examine workers in states of Australia where business conditions differed and examine the effects on relative satisfaction and perceptions of security. ABS data (ABS 2007) for the period identifies how the states of Queensland and Western Australia performed better than the national average, with greater employment expansion (4.1% and 3.1% per annum 2002-2007 respectively). Queensland and Western Australia are growth areas of the Australian economy, particularly in service and resource industries. In the lower performing states New South Wales and Victoria, employment expansion was lower than the national average (1.6% and 2.2% per annum 2002-2007). These states are more heavily associated with traditional manufacturing industries that are in longer term decline. The stronger economic performance of Queensland and Western Australia has meant that both have experienced positive net internal migration throughout this period (RBA 2007).

INSERT TABLE 6 HERE

The results for the workers in the two groups of states are presented in Table 6. In the life satisfaction regression, the casual dummy is insignificant in the lower performing states, as in the full sample, but negative and significant in high performing states. The effect of casual employment in the stronger performing states appears contrary to the proposition that a weaker economy should have a more detrimental effect on wellbeing to workers in insecure employment. We try to identify what contributes to the lower level of wellbeing amongst casual workers in high performing states. We take the same variables used in Table 5 and run separate regressions for the Higher and Lower performing states. In the regression results we find that casuals are significantly more likely to quit, identify their chances of being sacked as greater and their employment opportunities lower than permanent workers. These differences are slightly more marked in the lower performing states.[7] These results are more consistent with the insecurity hypothesis insofar as casual workers in poorer performing regions should be relatively more concerned about their employment opportunities and getting the sack. However, they do not address the question of casual wellbeing in Higher performing states. One possibility is that it may reflect stronger selection into casual employment of people with more insecure employment patterns. In the Higher performing states casual employees years of previous

those reported from the OLS estimates.

[7] The estimations were repeated for the variables indicating quit and sack as a tobit model reflecting the truncated nature of the response variable and the qualatative effects of the changes in the casual variable across tenure categories were the same as those reported from the OLS estimates.

unemployment is 1.31 yrs on average and in the lower performing states it is 1.08 years. Thus, the casual effect on wellbeing in Higher performing states reflects the greater incidence of unemployment, which would reduce wellbeing for any group of workers. Any habituation effect for casuals do not occur until more than two years of unemployment has been experienced according to the results in Table 3. Thus the majority of the extra unemployment experienced by casuals in High performing states is within the range where scarring effects are present. Two main reasons could be advanced that would contribute to this difference between States. We know that there has been net internal migration into the High performing states (RBA 2007). Thus, some internal migration to the Higher performing states may consist of individuals with weaker labour market histories who are attracted by the stronger labour market conditions. In addition, it could be that the referencing effect noted by Clark (2003) is at work as well. Casual workers gain a negative rather than positive externality from other insecure workers, their reference group. It is more stigmatising to be in casual work in a stronger labour market. The greater past unemployment experience of casual workers in the High performing states would serve to reinforce these negative externalities.

INSERT TABLE 7 HERE

Finally, we examine the relationship between contract type and financial stress. Table 7 reports estimates for our two indicators of financial stress, how often do you pay off monthly credit card balances and how often do you seek financial support from friends/family. The first column in both panels of the table is a simple probit with the financial stress indicator as the dependent variable. The results demonstrate that casual workers are more likely to seek financial help from social contacts and less likely to pay off monthly credit card balances. The next column of results establishes that both of these variables are associated with life satisfaction in the expected direction, conditional on observed characteristics and worker fixed effects. Paying off credit card balances is associated with higher life satisfaction, while seeking help from friend/family is associated with lower life satisfaction. Together these results suggest that financial stress may be one reason for lower wellbeing among casual workers. The third column asks the question, for a given incidence of financial difficulty is this felt more acutely by casual workers. There is no evidence that this is the case in terms of seeking financial support from friends/relatives, but the results for credit card balances are striking insofar as the relationship between credit card payment and wellbeing essentially only exists for casual workers. One reading of this result is that employment stability mitigates any negative impact of

difficulties servicing debt has on individual wellbeing. Again the financial variable that particularly affects casual wellbeing is one that is more closely related to instability in employment history for these workers. The correlation between ability to pay off credit card balances and unemployment history is -0.16 for casual workers and -0.09 for permanent workers. The equivalent figures for seeking financial help are 0.03 for casuals and 0.09 for permanent. Thus, credit card payment difficulties become more acute for casual workers with a history of unemployment and this is a source of stress for them.

4 Conclusion

This paper sought to investigate the effects on wellbeing for workers in insecure employment contracts who transition between jobs more than other workers. Specifically, we focussed on the role of key indicators of insecurity in employment had on their overall wellbeing; this included their accumulated experience of unemployment, their tenure and security in current employment and the degree of financial pressure. We demonstrate that increased past experiences of unemployment over an individual's working life generally have a scarring effect. This is a first indication of the protracted nature of scarring effects from unemployment. We find some evidence to suggest that workers in insecure employment contracts may become habituated to the effects of previous unemployment compared to permanent workers. However, it is rather more clear that the degree of security in their employment situation is a key driving factor for insecure worker wellbeing. In particular, longer tenure in their current employment was a significant source of wellbeing for insecure workers and greater tenure also improves their estimation of their job prospects, including their chance of keeping their job. The effect of unstable employment has other consequences for insecure workers, it appears more strongly linked to difficulties with managing credit and this is a significant source of decline in wellbeing.

The relationship between wellbeing and job security varied according to regional economic conditions. Insecure (casual) workers in higher performing regions were relatively less happy with their lives compared to permanent workers. This appears to be a result of the higher incidence and degree of previous unemployment amongst casual workers in these states, which is suggested to be an outcome of a variety of factors including the patterns of internal migration and insecure workers gaining a negative rather than positive externality from their reference group of other insecure workers.

Together, this evidence suggests that casual workers value security in employment and this security can

improve wellbeing in broader dimensions of their lives such as financial security. These results complement recent findings in other studies of the importance of job security but provide a much needed focus on the longer term implications of insecure employment and our original question relating to the possible benefits of a flexicurity model for manpower policy. Can loss of job security be accommodated by increased employment security? To this end, our results are complimentary to those presented by Origo and Pagani (2009) and emphasise the need for appropriate policies by firms and policy makers to enable employment transitions to occur more readily. Otherwise, the pressures that accompany employment and financial instability are likely to emerge.

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Table 1: Summary Statisitics, Male Employees Australia 2001-2008

	Permanent	Casual
Life satisfaction (W)	7.83 (1.31)	7.71 (1.61)
Real Hourly Wage (AUS$)	20.42	16.53
Previous unemployment (yrs) ($Uprev$)	0.46 (1.16)	1.23 (2.23)
Previous employment (yrs) ($Eprev$)	20.77 (11.65)	17.05 (13.81)
Age (yrs)	39.03 (11.23)	35.84 (13.84)
Part-time	0.03	0.39
Tertiary	0.25	0.14
Post-school	0.40	0.32
School	0.20	0.34
Couple	0.73	0.53
Long-term health problem	0.14	0.19
City	0.68	0.58
Regional	0.30	0.40
Remote	0.02	0.02
NESB	0.10	0.11
Public sector	0.15	0.06
Mortgage paid	0.16	0.15
Skilled (Prof & Mgmt)	0.37	0.14
Semi-skilled (Trades & Clerical & Admin & Sales & Communication & Personal Services)	0.43	0.41
Unskilled (Machinery Operatives & Drivers & Labourers)	0.20	0.45
Primary	0.11	0.15
Man & Communication (Man & Power & Comm & Trans & Construction)	0.39	0.38
Services	0.50	0.47
% chance sack next 12 months	8.98	18.98
% chance quit next 12 months	18.38	36.07
Satisfaction with employment opportunities	7.50 (1.88)	6.66 (2.33)
Pay off credit card balances (1 - 5)	3.88 (1.52)	3.50 (1.66)
Seek Financial Help from Friends and Family	0.10	0.22
Obs (person yrs)	14,702	2,919

Table 2: Life Satisfaction and Unemployment Histories, Male Employees 2001-2008

Life Satisfaction		
	Permanent	Casual
Average Unemployment (Unemp>0)	1.31	2.11
Average Life Satisfaction (Unemp>0)	7.66	7.56
Average Life Satisfaction (Unemp=0)	7.93	7.93
Average Life Satisfaction $U1$	7.69	7.85
$U1/(U1-U5)(\%)$	41.4	29.6
Average Life Satisfaction $U2$	7.73	7.58
$U2/(U1-U5)(\%)$	26.7	21.1
Average Life Satisfaction $U3$	7.70	7.19
$U3/(U1-U5)(\%)$	16.9	18.1
Average Life Satisfaction $U4$	7.40	7.36
$U4/(U1-U5)(\%)$	10.0	15.0
Average Life Satisfaction $U5$	7.36	7.49
$U5/(U1-U5)(\%)$	5.0	16.1

Table 3: Life Satisfaction Estimates Employed 2001-2005 (POLS RE Estimates) [b]

	Model I	Model II	F tests	
Wage	0.098* (0.02)	0.097* (0.02)		
Casual	-0.076* (0.03)	-0.095* (0.04)		
$U1$ (0 - 0.5yrs)	-0.038 (0.03)	-0.050 (0.03)	$U1$	1.92 [0.17]
$U2$ (0.5 - 1.0yrs)	-0.151* (0.04)	-0.1497* (0.05)	$U2$	10.90 [0.00]
$U3$ (1.0 - 2.0yrs)	-0.136* (0.05)	-0.0124** (0.05)	$U3$	5.15 [0.02]
$U4$ (2.0 - 4.0yrs)	-0.172* (0.05)	-0.194* (0.08)	$U4$	6.51 [0.01]
$U5$ (4.0 +yrs)	-0.197** (0.09)	-0.225** (0.10)	$U5$	4.97 [0.03]
$U1$ (0 - 0.5yrs)*Casual		0.060 (0.05)	$U1$ + $U1$*Casual	0.03 [0.87]
$U2$ (0.5 - 1.0yrs)*Casual		0.002 (0.08)	$U2$ + $U2$*Casual	3.39 [0.06]
$U3$ (1.0 - 2.0yrs)*Casual		-0.032 (0.08)	$U3 + U3$*Casual	3.17 [0.07]
$U4$ (2.0 - 4.0yrs)*Casual		-0.070 (0.10)	$U4$ + $U4$*Casual	1.67 [0.20]
$U5$ (4.0 +yrs)*Casual		0.071 (0.12)	$U5$ + $U5$*Casual	1.88 [0.17]
Obs	17,621	17,621		
Hausman (χ^2)	0.25	0.38		
R-squared	0.07	0.07		

[b] *, **,*** represent signifcance at the 1%, 5% and 10% levels respectively. Standard errors are robust and clustered at the individual level. Other variables included but not reported include; occupation dummies (9), industry dummies (16), age and age squared, education dummies (7), part-time dummy, long-term health condition dummy, living as a couple dummy, geographic dummies (3), working in public sector dummy, mortgage paid dummy and time fixed effects.

Table 4: Life Satisfaction Estimates - Robustness Tests [c]

	Life Satisfaction Unemployed by Duration of Unemployment		F - tests	
$U1$ (0 - 0.5yrs)	0.024 (0.15)	0.015 (0.17)	$U1$	0.01 [0.93]
$U2$ (0.5 - 1.0yrs)	-0.211 (0.15)	-0.277 (0.18)	$U2$	2.22 [0.14]
$U3$ (1.0 - 2.0yrs)	-0.398* (0.15)	-0.381** (0.17)	$U3$	4.69 [0.03]
$U4$ (2.0 - 4.0yrs)	-0.279** (0.14)	-0.407* (0.16)	$U4$	6.15 [0.01]
$U5$ (4.0 +yrs)	-0.384* (0.14)	-0.377* (0.14)	$U5$	5.95 [0.01]
$U1$ (0 - 0.5yrs)*Casual$_{t+1}$		0.519*** (0.30)	$U1$ + $U1$*Casual$_{t+1}$	3.99 [0.05]
$U2$ (0.5 - 1.0yrs)*Casual$_{t+1}$		0.431 (0.30)	$U2$ + $U2$*Casual$_{t+1}$	0.34 [0.56]
$U3$ (1.0 - 2.0yrs)*Casual$_{t+1}$		-0.250 (0.43)	$U3$ + $U3$*Casual$_{t+1}$	2.96 [0.10]
$U4$ (2.0 - 4.0yrs)*Casual$_{t+1}$		-0.329 (0.35)	$U4$ + $U4$*Casual$_{t+1}$	3.46 [0.08]
$U5$ (4.0 +yrs)*Casual$_{t+1}$		-0.449 (0.39)	$U5$ + $U5$*Casual$_{t+1}$	4.72 [0.03]
Obs	1,055	1,055		
R-squared	0.14	0.14		

	Life Satisfaction Employed by Duration of Unemployment (Fixed Effects)				
	U 0 - 0.5	U 0.5 - 1.0	U 1.0 - 2.0	U 2.0 - 4.0	U4+
Wage	0.106 (0.08)	0.113 (0.10)	0.184** (0.09)	0.134 (0.14)	-0.014 (0.23)
Casual	-0.065 (0.07)	-0.0003 (0.09)	-0.068 (0.10)	0.075 (0.15)	-0.040 (0.16)
Obs	2,627	1,717	1,174	765	509
R-squared within	0.04	0.08	0.07	0.08	0.17
R-squared between	0.02	0.01	0.01	0.02	0.02

[b] *, **,*** represent signifcance at the 1%, 5% and 10% levels respectively. Standard errors are robust and clustered at the individual level. Other variables included but not reported include; occupation dummies (9), industry dummies (16), age and age squared, education dummies (7), part-time dummy, long-term health condition dummy, living as a couple dummy, geographic dummies (3), working in public sector dummy, mortgage paid dummy and time fixed effects.

Table 5: Life satisfaction 2001-2005 (POLS FE Estimates) [d]

	Life Satisfaction		Chance Quit (%)	
	Tenure 0-2yrs	Tenure 2yrs+	Tenure 0-2yrs	Tenure 2yrs+
Wage	0.093*** (0.05)	0.078** (0.04)	-5.693* (2.34)	-4.719* (1.42)
Casual	-0.088** (0.04)	-0.004 (0.05)	6.957* (1.77)	0.556 (2.14)
Obs	6,860	12,634	6,860	12,634
Averages				
Perm	7.80	7.84	24.63	16.70
Cas	7.67	7.80	36.61	26.45
	Chance Sack (%)		Satisfaction with Emp Opportunities	
	Tenure 0-2yrs	Tenure 2yrs+	Tenure 0-2yrs	Tenure 2yrs+
Wage	2.528 (1.62)	0.979 (0.97)	0.207* (0.06)	0.142* (0.04)
Casual	11.550* (1.30)	4.157* (1.63)	-0.246* (0.04)	-0.071 (0.05)
Obs	6,860	12,636	6,860	12,636
Averages				
Perm	10.32	8.56	7.66	7.43
Cas	21.25	13.19	6.83	6.91

[d] *, **,*** represent signifcance at the 1%, 5% and 10% levels respectively. Standard errors are robust and clustered at the individual level. Other variables included but not reported include; occupation dummies (9), industry dummies (16), age and age squared, education dummies (7), part-time dummy, long-term health condition dummy, living as a couple dummy, geographic dummies (3), working in public sector dummy, mortgage paid dummy and time fixed effects.

Table 6: Life satisfaction 2001-2008 (POLS FE Estimates) [d]

	Life satisfaction		Chance quit (%)	
	Low States	High States	Low States	High States
Wage	0.120* (0.04)	0.051 (0.05)	-6.230* (1.69)	-3.614 (2.31)
Casual	0.010 (0.04)	-0.125* (0.05)	6.830* (2.03)	5.025* (2.09)
Obs	9,362	5,668	9,362	5,668
Averages				
Perm	7.85	7.81	18.49	19.46
Cas	7.72	7.66	33.95	34.69
	Chance sack (%)		Satisfaction with Emp Opportunities	
	Low States	High States	Low States	High States
Wage	1.604 (1.23)	2.073 (1.48)	0.111* (0.04)	0.182* (0.06)
Casual	9.372* (1.55)	9.203* (1.61)	-0.188* (0.05)	-0.172* (0.06)
Obs	9,362	5,668	9,362	5,668
Averages				
Perm	10.07	8.32	7.36	7.49
Cas	20.46	19.69	6.65	6.88

[g] *, **,*** represent signifcance at the 1%, 5% and 10% levels respectively. Standard errors are robust and clustered at the individual level. Other variables included but not reported include; occupation dummies (9), industry dummies (16), age and age squared, education dummies (7), part-time dummy, long-term health condition dummy, living as a couple dummy, geographic dummies (3), working in public sector dummy, mortgage paid dummy and time fixed effects.

Table 7: Financial Difficulties and Contract Type, 2001-2008 [g]

	How Often Pays Off Monthly Credit Card Balances		
	Ordered Pr(Pay Card)	Lifesat (FE)	Lifesat (FE)
Wage	0.318* (0.05)	0.156* (0.06)	0.154* (0.06)
Casual	-0.143* (0.07)	-0.075 (0.08)	-0.358* (0.16)
Pay Card		0.024** (0.01)	0.019 (0.01)
Pay Card* Casusal			0.084** (0.04)
R^2	0.04	0.01	0.01
Obs	5,631	5,631	5,631

	Seek Help from Family and Friends		
	Pr (Seek Help)	Lifesat (FE)	Lifesat (FE)
Wage	-0.399* (0.04)	0.098* (0.03)	0.098* (0.03)
Casual	0.269* (0.04)	-0.052 (0.03)	-0.047 (0.03)
Seek Help		-0.095* (0.03)	-0.091* (0.03)
Seek Help* Cas			-0.021 (0.06)
R^2		0.03	0.02
Obs	17,621	17,621	17,621