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**Flexible contract workers in inferior jobs:
reappraising the evidence**

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Flexible Contract Workers in Inferior Jobs: Reappraising the Evidence.

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Abstract

There has been concern that the increase in non-standard or flexible employment contracts witnessed in many OECD economies is evidence of a growth in low-pay, low-quality jobs. In practice, however, it is difficult to evaluate the `quality' of flexible jobs. Previous research has either investigated objective measures of job quality such as wages and training or subjective measures such as job satisfaction. In this paper, we seek to jointly evaluate objective and subjective elements of flexible employment contracts. Specifically we develop and use an index of job quality that incorporates both subjective and objective elements. Analysis of this index demonstrates that flexible jobs are of a lower quality. However, this approach suggests that analysis of, for instance, job satisfaction alone overstates the negative impact of flexible contracts on workers.

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I INTRODUCTION

There has been a continuing debate about the growing divide between low quality jobs with low pay and high quality jobs with high pay in OECD countries (European Commission 2001). In particular, there is a concern that non-standard or flexible employment contracts are associated with low quality, low pay jobs (European Commission 2003; Hall et. al 2000). In practice, there are many reasons why firms may offer, and workers accept flexible working contracts. For workers, flexible contracts may enable a balance to be achieved between work and family commitments. However, whilst this might improve life satisfaction it would appear less likely to improve job satisfaction. Yet there has been recent evidence of part-time workers job satisfaction that presents a confusing picture. Female part-time workers in the UK reported higher levels of job satisfaction than full-time counterparts (Booth and van Ours 2008) even though there is part-time pay penalty (Booth and Wood 2008). In Australia, where casual workers receive a pay premium, female part-time casual workers reported higher job satisfaction than full-time permanent female workers but male full-time casual workers were less satisfied than their permanent counterparts (Wooden and Warren 2004).

Assessment of the `quality' of flexible jobs is made a complex task through the many objective and subjective domains open for evaluation. Objective criteria would include factors such as pay and access to training, subjective criteria could include self-reported job satisfaction. Are jobs that are identified as objectively worse (better) associated with lower (higher) levels of satisfaction in subjective evaluation? This paper provides some evidence to show that such simple conclusions cannot readily be drawn.

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The data used in this paper relates to a national longitudinal survey of Australian workers. Australia is a particularly appropriate market to examine in this regard as it has the second highest proportion of flexible workers in the world after Spain, in 2003 27% of workers were on flexible employment contracts[1] and standard full-time workers were in a minority by 1997 (ABS 1997); 28% of the workforce was working over 44 hours per week and 25% were working part-time. The number of workers working over 60 hours per week is the second highest in the developed world (ACTU 2001). Casual workers, the main form of flexile employment, experience significant variation in hours worked per week. For example, in November 2003 27% of casuals had hours that varied from week to week compared to 9% for permanent employees (ABS 2005).

Previous research into flexible employment has tended to focus on either subjective evaluations of worker well being, such as responses to job satisfaction questions (Bardasi and Francesconi 2004; Green and Heywood 2007; Ferrer-i-Carbonell and Van Praag 2006; Kaiser 2002) or objective evaluations, such as access to training (Arulampalam and Booth 1998; Draca and Green 2004), relative rates of pay (Morreti 2000) or the effect on the likelihood of gaining permanent employment (Green and Leeves 2004; Guell and Petrongolo 2000). Few studies have investigated both objective and subjective evaluations. One exception is Booth et al. (2002) who looked at the job satisfaction, pay and training of flexible and permanent contract workers in the UK. They noted that if flexible contracts are part of a firm's periphery workforce and workers have sorted

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[1] These flexible contracts differ in type, the predominate form in Spain is fixed term contracts, whilst in Australia the main form of flexible contract is casual employment.

themselves into flexible contract jobs then wages will be higher to compensate for the lower levels of protection afforded, they will receive less training but will be as satisfied as permanent workers. However, if flexible contracts are a screening device for offers of permanent work then these workers are likely to be on average of lower ability, will be offered lower wages and will be less satisfied than permanent contracted workers. Indeed Booth et al. (2002) found that flexible contract workers were in general paid less, received less training and were less satisfied.

Importantly, previous studies have not attempted to examine the interaction between objective and subjective characteristics of flexible employment contracts. We argue that a failure to do this may lead to misleading conclusions regarding the quality of flexible working contracts. For instance, Leontaridi et al. (2005) find that in the UK higher paid workers do not have, on average, higher job satisfaction. They argue this is evidence that wage disparities represent compensating differentials rather than a segmented labour market of good and bad jobs. As noted earlier, Booth and van Ours (2008) report that partnered females working part-time in the UK, with or without children, are more satisfied with their jobs than full-time employees even though it does not increase their life satisfaction. Yet as they note these part-time jobs are associated with lower wages, less training and occupational downgrading (Connolly and Gregory 2008). This they term a puzzle which they were unable to resolve. In this paper we examine the impact of flexible contracts on the interaction between job satisfaction and pay, working hours and other dimensions of the work environment.

This paper uses data from Australia contained in the Household Income and Labour Dynamics in Australia (HILDA). There has been previous work investigating flexible employment workers satisfaction using this dataset. It highlights the tension between objective and subjective evaluation. Wooden and Warren (2004) investigated subjective responses of flexible contract workers by analyzing relative levels of overall job satisfaction. They find fixed contract workers are relatively more satisfied with their jobs than other workers and casual workers are in the main no less satisfied than other groups, with the exception of full-time male casuals who are less satisfied. They argue that this suggests many flexible contract workers do not see these jobs as inferior and many want to remain in such contracts even if opportunities for conversion to permanency were available. In a later study Watson (2005) attempts an objective evaluation through a comparison of earnings. He finds that casual workers are not paid sufficiently to compensate for their loss of entitlements (sick leave and holiday pay). This leads him to conclude that casual jobs are inferior jobs.

Both of the earlier Australian studies used only the first wave of HILDA data. The present study uses five waves of HILDA data to provide a panel that is used to extend previous research in two directions Firstly, the panel will enable us to control for sorting of workers between contract types. This is important as workers are unlikely to be randomly assigned to contract types, hence estimates of contract effects may be biased in cross-sectional models. We use the recently developed fixed effects estimators using latent variables that permit the application of OLS (Van Praag and Ferrer-i-Carbonell 2004). Secondly, we employ contract effects derived from these estimators to derive

summative measures that incorporate and combine objective and subjective evaluations of contracts, which have previously been the subject of separate analysis.

II DATA AND METHODOLOGY

The data used in this analysis is taken from the first 5 waves (2001-2005) 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 Socio-Economic Panel (GSOEP) in structure. The HILDA dataset provides a rich source of information on labour market participation, outcome and performance. There is information on firm size, union membership, industry type and length of employment. Socio-demographic data include age, place of birth, marital status and number of years in formal education. These five waves yield a total of 64,905 observations[2], of which 33,227 or 51.19% state their employment status as being employees. Of this group, 16,752 or 50.42% are males and 16,475 or 49.58% are female. An unbalanced panel[3] data is used for the purposes of this study, encompassing 23,693 employees[4] (12,282 males, 11,411 females), once we account for inconsistencies in the data and removing individuals with incomplete answers.

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[2] 13,969 in Wave 1, 13,041 in Wave 2, 12,728 in Wave 3, 12,408 in Wave 4 and 12,759 in Wave 5. The issue of attrition is tackled by including new individuals in every wave, thus keeping numbers fairly constant in every wave.

[3] A balanced panel dataset will consist of 46,555 observations before any further data manipulation is carried out.

[4] Specifically, those employed in one job only. Apart from those holding multiple jobs and the unemployed, also excluded are those who are self-employed and unpaid family workers.

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. Approximately 32% of casuals in 1998 worked 30 or more hours a week (ABS, 2001).

There are well known difficulties with categorizing employment contract types in Australia (Murtough and Waite 2000, Wooden and Warren, 2004; Watson 2005), 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 categorise 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. For instance in the five waves of HILDA, 33,277 individuals claimed to be employees, of these 8,106 are categorised as being employed on a casual basis, as opposed to 9,136 following the standard ABS definition.

Individuals on casual employment contracts are paid a loading that is meant to compensate them for their lack of sick and holiday leave entitlements. Over the period 1994-2001 the average casual loading for enterprise agreements was 21% and the Casual Loading in Industry Awards 1994-2004 was approximately 20%. Hence a figure of approximately 20% can be considered as the premium or loading for casuals that would offset their loss of entitlements from an objective viewpoint.

HILDA contains detailed information on workplace satisfaction. Respondents are asked to choose a number on Likard scale ranging from 0 and 10 to indicate their levels of satisfaction with a range of workplace satisfaction measures. The various measures are overall job satisfaction, satisfaction with pay, satisfaction with job security, satisfaction with hours of work, satisfaction with (type of) work and satisfaction with the flexibility to balance work and non-work commitments (job flexibility). The workplace satisfaction questions given to respondents (E36 of the Person Questionnaire in Wave 1) are reproduced as Appendix 1. In appendix Table A1 we present summary statistics for the key variables that will feature in the later analysis and we disaggregate these by contract status and gender. In the lower half of the Table we present the satisfaction results for part-time workers, as earlier research has suggested part-time flexible workers are no less satisfied with their jobs than permanent workers.

The overall results for wages and hours conform to prior expectations with permanent workers working longer and being paid more per hour on average than casual workers. Casual workers, it is argued, lack access to traditional career paths (Pocock et al. 2004)

which limits opportunities for salary progression. Fixed-term contract workers hours and earnings are broadly comparable with permanent contract workers. For males, fixed-term contract workers appear to be the most satisfied and casual workers the least satisfied. Wooden and Warren (2004) reported that part-time male casuals were more satisfied with their pay and overall job satisfaction than permanent workers. We found this did not hold in our data sample where figures for overall satisfaction were 7.40 (permanent) and 7.11 (casual) and for pay satisfaction 6.50 (permanent) and 6.48 (casual). Female casual workers are more satisfied with their pay than permanent workers. This was also evident in the Wooden and Warren (2004) results. However female fixed-term contract workers' overall satisfaction appears to have fallen compared to the results reported by Wooden and Warren (2004).

Satisfaction variables have traditionally been examined using ordered probit models, reflecting the ordinal nature of the dependent variable. 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 the 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. 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 inclusion of fixed effects as controls. Fixed effects are reported to be a stronger influence on results derived using satisfaction variables than accounting for the ordinal nature of the dependent variable (Ferrer-i-Carbonell and Frijters 2004).

III RESULTS

The estimates in Table 1 are the POLS results with individual fixed effects for males and females where the dependent variable is overall job satisfaction. In columns two and four we include dummies for employee contract status and interact these dummies with a variable indicating usual hours of work. The focus on hours worked is warranted as it is the peripheral nature of flexible work with more variable hours that has led them to be characterized as bad jobs (Campbell and Brosnan 1999; Hall et al. 1998). There are a set of control variables covering a range of individual and workplace characteristics that are listed in the Appendix. We observe that casuals are less satisfied with their jobs than permanent workers, the omitted category. Green and Heywood (2007) report similar results for the UK, where both agency and casual work are associated with lower job satisfaction. Ferrer-i-Carbonell and Van Praag (2006) report lower job satisfaction for temporary, casual, and fixed contract workers in Spain. There is some weak evidence that female casuals' job satisfaction improves the more hours they work per week

INSERT TABLE 1

In Columns 3 and 5 we split contract status by hours worked, using a similar classification to that used by Wooden and Warren (2004). The omitted case is permanent employees who work a standard week (35-39 hours); a `standard' employment contract. In this way we seek to compare the impact of contract status and hours worked to what can be considered a standard job. The lower job satisfaction associated with casual

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employment observed in columns 2 and 4 is mainly associated those working part-time hours. This may represent dissatisfaction with hours, which we explore more specifically later. Unlike males, female casual employees who work extended hours experience greater job dissatisfaction. This could reflect a greater unwillingness to work overtime as there could be a higher opportunity cost due to family responsibilities. Additionally, these hours may be unpaid and so offer a lower return. This pattern differs from the UK where part-time female workers were more satisfied (Booth and van Ours 2008).

Analysis of pay is conducted across the two domains, subjective and objective. First we assess subjective satisfaction with pay by contract status. Later we provide evidence on objective wage differentials by contract status when we identify the wage premiums or penalties that non-permanent workers receive relative to permanent workers. The pay satisfaction results are presented in Table 2, where we control for hours worked as in Table 1. We estimated the regressions with and without a control for hourly pay (columns 4 and 7); this did not affect the results to any material degree. This suggests that variations in pay do not substantially alter the effect of casual contracts on pay satisfaction. Casual workers, other than males working part-time, are significantly more satisfied with their pay than the benchmark case of full-time permanent workers. Higher pay satisfaction is also observed for males working extended hours, whatever their contract status.

INSERT TABLE 2

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The results presented in Table 1 suggest casual workers' job satisfaction is sensitive to hours worked. To further investigate this we ran regressions with satisfaction with hours worked as the dependent variable and the results are reported in Table 3. Male casual part-time workers are relatively dissatisfied with hours and those working extended hours are relatively more satisfied. By contrast, male and female fixed-term contract and permanent workers working extended hours are relatively less satisfied. Booth van Ours (2008) found, using data from the UK BHPS, that men prefer standard full-time hours and are dissatisfied with overtime hours. Female part-time workers appear happier with their hours. Booth and van Ours (2008), reported a similar result, which the authors suggested is indicative of traditional gender divisions of work and family duties within households. Thus dissatisfaction with hours may be an important element of the lower overall job satisfaction for male part-time casuals but not, it appears, for females.[5]

INSERT TABLE 3

Possible alternative sources of job dissatisfaction are the nature of the work and work environment. Connolly and Gregory (2008) identify how female part-time work has become more menial in the UK between 1991 and 2001. Watson (2005) argues that casual workers in Australia are crowded into lower grade occupational classifications and argues that casuals are a way of maintaining a just-in-time workforce.

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[5] ABS data for 2003 (ABS 2005) indicates that 38% of male part-time casuals wanted to work more hours compared to 29% of females.

HILDA asked a range of questions about aspects of current employment. These are not questions directly about satisfaction but ask respondents to assess their jobs according to specific criteria. One question asked the respondents "I use many of my skills and abilities in my current job" another was "I have a secure future in my job" and another "I have a lot of freedom to decide how I do my own work", the respondents were asked to reply whether they strongly agree or disagree graded on a seven point scale. A number of respondents did not complete answers to these set of questions, so the sample size is lower than in the previous tables. For brevity, we report only the results for the males and females with the hours and contract status classifications in Table 4.

INSERT TABLE 4

It is evident, from columns two and three, that on average part-time female employees feel they are not presently using all of their skills and abilities to the extent of full-time permanent workers; this supports the evidence presented in Connolly and Gregory (2008). In columns four and five we repeat the exercise with job security as the dependent variable. As might be expected, casual and fixed contract workers perceive their job security to be lower than full-time permanent workers. This applies no matter what hours are being worked. Finally, columns six and seven present the results for the assessment of job freedom. Full-time casual workers seem to perceive that they have less freedom to decide how their work is done but not those working part-time or extended hours. Female fixed term contract and permanent employees on extended hours appear to have relatively more freedom in deciding how their work is undertaken. Overall, the

results suggest that opportunities to use skills and job security may both contribute to lower overall satisfaction. In the next section, we provide evidence of wage premiums for the different types of contracts by hours worked.

IV OBJECTIVE MEASURES

INSERT TABLE 5

In Table 5 we present the results for estimates of relative wage premiums using the same contract status and hours breakdown as before. We would expect casual employees to earn a premium over permanent employees in the order of 20% if they were receiving full compensation for loss of entitlements. We present estimates which are unconditional and conditional on hours worked. Focusing on the results that are conditional on hours worked, casual employees working less than or more than standard hours actually receive a wage penalty, albeit relatively small, rather than a premium, which is similar to that experienced by permanent workers on non-standard hours. Overall, the pay of casual workers appears insufficient to compensate for their loss of entitlements and is not consistent with the pay satisfaction estimates. In the next section we attempt to reconcile some of this divergent evidence on job quality.

V GOOD OR BAD JOBS ?

To bring together these pieces of evidence regarding the "quality" of jobs under different contracts we need some summative measure that can be used as a metric to gauge relative quality. In a recent paper Haisken-DeNew and Sinning (2007) examine social exclusion of migrants and modify traditional estimates of exclusion by weighting characteristics

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that define exclusion by their impact on life satisfaction. We adopt a similar approach in the present paper by taking the objective and subjective characteristics of the employment environment that we have previously examined. Their estimated effect on worker overall job satisfaction is estimated using POLS. The coefficients from these regressions are used as weights and combined with values of the characteristics to produce an index measure hereafter referred to as SATW and this is compared with a simple index derived from the addition of the characteristics (SUM).

To determine if a set of variables might form a consistent index, we use Cronbach's alpha statistic as a guide, this assesses how well a set of variables measure a single unidimensional latent construct. If the correlations between each item and the rest are reasonably consistent and each item provides a positive contribution to the overall value of alpha then those items fit well in the scale and are measuring the same underlying construct.

The variables selected were chosen based on the earlier analysis and included two objective measures log wages and log hours. The other three variables are the subjective assessments of the work environment which were analysed in Table 4. The values for Cronbach's alpha were, 0.603 for males and 0.615 for females. This is slightly on the low side for the generally accepted criteria for reliability (0.70). However our purpose was to ensure internal consistency, such that all variables are measuring the same construct. We are concerned with relative movements in index values rather than levels. It was found that all variables correlation with the other items in the index was reasonably consistent

(0.17 – 0.39 males) (0.21 – 0.52 females) and all items contributed positively to the overall alpha value.

INSERT TABLE 6

All variables were normalized as they were based on different scales. The results from the POLS job satisfaction regressions using the normalized variables which were used to obtain the coefficients used in the index weighting are reported in Table 6(a). For males we observe two main differences between permanent and fixed contract and casual workers. Permanent workers overall satisfaction increases with higher wages, wages do not impact significantly on overall satisfaction for fixed-term and casual workers. Thus, casual worker's lower wage does not adversely impact on satisfaction. However casual worker's overall satisfaction is, like permanent workers, sensitive to opportunities to use skills, obtain security and achieve freedom at work and their opportunities are relatively limited. For females, the differences centre on hours of work and use of job skills. Permanent workers work more hours and this has a negative impact on job satisfaction, casual and fixed contract workers satisfaction is not affected by hours of work. Female casuals' use of skills in their jobs is far lower than other workers but this does not impact on job satisfaction. Job tenure whilst not reported in earlier results was found to consistently have a significant negative impact on job satisfaction, though this decline was reduced as tenure increased. We included tenure and its squared term in addition to our previous variables and the results are presented in Table 6(b). Tenure had its expected

impact on overall satisfaction, except in the case of casual and fixed-term male workers. We will use both specifications in the construction of index values.

INSERT TABLE 7

The index values are presented in Table 7(a) and (b), the upper panel contains the results for females and the lower males. The first row is a simple summation of each item divided by number of items in the index (SUM), with log hours worked included as negative values; knowing that these two variables contribute negatively to job satisfaction for the vast majority of workers. Each item is given the same importance in generating the index value. The second row is generated by each characteristic being weighted by its satisfaction coefficient (SATW). The coefficients from Table 6(a) were multiplied by (1 – p value), to increase the weight when an item was highly significant. These were then summed and divided by the number of items. For females we note that SUM for both flexible contracts has index values that are negative whereas permanent workers' index value is positive. Casual employment is the lowest ranked. When the values are calculated by SATW then the index values for casual and flexible work increase and permanent work declines. Fixed contract work is now the most highly rated and casual work rates slightly behind permanent work. For males (lower panel), using SUM casual work is once again the lowest ranked and fixed contract and permanent work are very similar. With SATW, we again see an improvement in the casual score and a decline in the fixed contract and permanent work index values. Casual work scores higher on a satisfaction weighted basis. The factors that significantly influence casual workers' job

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satisfaction lead to their job quality being better than it would be judged from a more objective perspective. The same conclusion can be drawn from the index calculations when the tenure variables are included in Table 7(b).

Finally, in Table 7(c) we repeat the exercise with the same set of variables as in Table 7(a) for part-time and full-time workers separately.[6] Unlike Table 7(a) part-time casual workers SATW value does not increase compared to the SUM value. In the case of female casual workers SATW value hardly changes so there is still a relative improvement because the permanent index declines. For male casuals there is an actual decline in SATW similar to that experienced by permanent workers. This decline can be attributed to their assessment of job security and use of skills. The mean value for assessment of job security for part-time casuals was -0.631 and for permanent part-timers was 0.059, the figures for use of skills were -0.695 and -0.323 respectively. Both these variables were positive and highly significant in the casual job satisfaction regression; only use of skills was positive and significant in the permanent job satisfaction regression. Hence, male part-time casuals' relative position does not improve. By contrast, full-time casual workers satisfaction weighted index improves and also their position relative to permanent workers as in Table 7(a).

VI CONCLUSIONS

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[6] There were insufficient numbers of male fixed-term contract workers to provide valid estimates

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Wooden and Warren (2004) argued that it is extremely misleading to characterize non-standard jobs (casual and fixed-term contract) as sub-standard jobs. This was based on comparisons of the responses to overall job satisfaction evaluation across job contract types conditional on worker and employment characteristics. Other recent studies have highlighted the difference between objective and subjective evaluation of non-standard employment (Booth and van Ours 2008). The current research has sought to increase our understanding of worker evaluation of non-standard jobs by analyzing and combining a number of objective and subjective criteria. This can create complex chains of relationships. Thus, although the hourly wage for non-standard male casual employment is in an objective sense insufficient to compensate for the loss of entitlements, these workers are relatively more satisfied with their hourly wage than permanent workers; but wages do not appear to significantly affect their overall job satisfaction. Overall job satisfaction is more closely related to their evaluation of job security, job freedom and opportunities to use their skills. By contrast, although female casual workers are also more satisfied with their pay than their permanent counterparts, in their case higher wages do lead to increased overall job satisfaction. Female casuals' satisfaction is also positively affected by increased job security and job freedom but not by opportunities to use their skills

We attempted to combine all this information on the drivers of job satisfaction by creating an index of job quality and weighting the components of the index by their impact on job satisfaction. The resulting index values illustrated that non-standard employment rated better in relation to permanent employment than compared to a simple

summation of the constituent elements. Hence, although casual and fixed-term still rated below permanent employment, the elements that impact on satisfaction result in the quality of the jobs being rather higher than might be expected. Our results also confirmed earlier findings in that it appears fixed-term contract workers are relatively more satisfied with their jobs than casual workers. However, the suggestion that part-time casual workers are relatively more satisfied with their jobs compared to full-time casuals (Wooden and Warren 2004) received less support. Full-time casual employees work environment seem to generate increased satisfaction compared to part-timers. In particular part-time male casuals seem to be the least satisfied group of workers. As a result, the growth of more flexible working arrangements, occurring through increased casual employment in Australia, may need careful management, particularly in areas like job security and opportunities for skill development for workers who are more strongly attached to the labour force.

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Table 1 Job Satisfaction Estimates + (t stats in brackets)

	POLS (MALE) FE	POLS (MALE) FE	POLS (FEMALE) FE	POLS (FEMALE) FE
Log wage hr	0.247*	0.257*	0.299*	0.311*
	(5.55)	(5.94)	(6.9)	(7.01)
Log wrk hrs	0.015		-0.072	
	(0.20)		(1.50)	
Casual	-0.641**		-0.422**	
	(2.00)		(2.28)	
Fixed	-0.881		-0.104	
	(1.62)		(0.33)	
Agency	0.023	-0.141**	-0.359	-0.095
	(0.04)	(2.30)	(0.96)	(0.84)
Casual *log wrk hrs	0.135		0.102***	
	(1.54)		(1.80)	
Fixed*log wrk hrs	0.223		0.017	
	(1.55)		(0.19)	
Agency*log wrk hrs	-0.043		0.089	
	(0.29)		(0.81)	
Casual < 35 hrs		-0.239*		-0.105**
		(3.80)		(2.20)
Casual 35 – 40 hrs		-0.091		-0.003
		(1.56)		(0.04)
Casual 41 + hrs		-0.077		-0.233***
		(1.13)		(1.87)
Fixed < 35 hrs		-0.19		-0.046
		(1.37)		(0.67)
Fixed 35 – 40 hrs		-0.018		-0.044
		(0.34)		(0.78)
Fixed 41 + hrs		0.024		-0.028
		(0.46)		(0.38)
Perm < 35 hrs		0.039		-0.004
		(0.52)		(0.10)
Perm 41 + hrs		0.065**		0.016
		(2.34)		(0.44)
R^2				
within	0.03	0.03	0.04	0.04
between	0.00	0.00	0.00	0.00
overall	0.00	0.00	0.00	0.00
F test $u_i =0$	0.00	0.00	0.00	0.00
Obs	12,282	12,282	11,411	11,411

+ * sig 1%, ** sig 5% , *** sig 10% Covariates included but not reported include education (7 categories), age (10 categories), measure of long-term health, living as a couple, employer size (3 categories), union member, supervisory responsibilities , tenure with employer (and squared tenure), public

sector employee, occupation (9 categories), industry (17 categories), states/territories (8 categories) and wave dummies.

Table 2 Pay Satisfaction Estimates+ (t stats in brackets)

	POLS FE MALE	POLS FE MALE	POLS FE MALE	POLS FE FEMALE	POLS FE FEMALE	POLS FE FEMALE
Log wage hr	0.805*	0.745*		0.552*	0.536*	
	(18.89)	(17.95)		(12.74)	(12.62)	
Log wrk hrs	0.612*			0.080***		
	(8.69)			(1.77)		
Casual	0.959*			0.046		
	(3.13)			(0.26)		
Fixed	-0.164			-0.443		
	(0.31)			(1.48)		
Agency	-0.593	-0.052	-0.007	0.091	-0.016	-0.005
	(1.15)	(0.89)	(0.11)	(0.26)	(0.24)	(0.07)
Casual*log wrk hrs	-0.233*			0.051		
	(2.77)			(0.94)		
Fixed*log wrk hrs	0.045			0.136		
	(0.33)			(1.62)		
Agency*log wrk hrs	0.148			-0.035		
	(1.05)			(0.33)		
Casual < 35 hrs		-0.080	-0.032		0.124*	0.183*
		(1.33)	(0.53)		(2.72)	(4.00)
Casual 35 – 40 hrs		0.111**	0.116**		0.204*	0.210*
		(1.99)	(2.05)		(3.03)	(3.09)
Casual 41 + hrs		0.296*	0.208*		0.334*	0.268**
		(4.50)	(3.10)		(2.80)	(2.22)
Fixed < 35 hrs		-0.148	0.016		-0.054	-0.011
		(1.09)	(0.11)		(0.82)	(0.17)
Fixed 35 – 40 hrs		0.028	0.028		0.049	0.039
		(0.4)	(0.53)		(0.91)	(0.71)
Fixed 41 + hrs		0.194*	0.091***		0.111	0.048
		(3.88)	(1.79)		(1.9)	(0.68)
Perm < 35 hrs		-0.065	0.010		-0.065***	-0.031
		(0.90)	(0.14)		(1.79)	(0.80)
Perm 41 + hrs		0.196*	0.096*		0.054	-0.019
		(7.33)	(3.59)		(1.54)	(0.55)
R^2						
within	0.06	0.06	0.02	0.05	0.05	0.03
between	0.06	0.07	0.01	0.03	0.03	0.00
overall	0.07	0.07	0.01	0.03	0.04	0.01
F test $u_i =0$	0.00	0.00	0.00	0.00	0.00	0.00
Obs	12,282	12,282	12,282	11,411	11,411	11.141

+ * sig 1%, ** sig 5% , *** sig 10% Covariates included as in Table 2

Table 3 Hours Satisfaction Estimates+ (t stats in brackets)

	POLS FE MALE	POLS FE MALE	POLS FE FEMALE	POLS FE FEMALE
Log wage hr	0.242*	0.301*	0.247*	0.191*
	(5.23)	(6.68)	(5.20)	(4.12)
Log wrk hrs	-0.967*		-0.332*	
	(12.64)		(6.65)	
Casual	-4.390*		-1.583*	
	(13.20)		(8.17)	
Fixed	-1.584*		0.146	
	(2.80)		(0.45)	
Agency	-0.643	0.085	-0.344	-0.047
	(1.15)	(1.33)	(0.88)	(0.65)
Casual*log wrk hrs	1.173*		0.488*	
	(12.84)		(8.17)	
Fixed*log wrk hrs	0.416*		-0.046	
	(2.78)		(0.50)	
Agency*log wrk hrs	0.202		0.079	
	(1.32)		(0.68)	
Casual < 35 hrs		-0.482*		0.089***
		(7.36)		(1.79)
Casual 35 – 40 hrs		-0.056		0.036
		(0.93)		(0.49)
Casual 41 + hrs		0.212*		0.170
		(2.97)		(1.31)
Fixed < 35 hrs		-0.176		0.241*
		(1.19)		(3.37)
Fixed 35 – 40 hrs		-0.085		0.036
		(1.53)		(0.62)
Fixed 41 + hrs		-0.266*		-0.432*
		(4.92)		(5.67)
Perm < 35 hrs		-0.072		0.261*
		(0.92)		(6.26)
Perm 41 + hrs		-0.324*		-0.326*
		(11.15)		(8.44)
R^2				
within	0.05	0.05	0.04	0.05
between	0.04	0.04	0.01	0.03
overall	0.05	0.04	0.02	0.03
F test $u_i =0$	0.00	0.00	0.00	0.00
Obs	12,282	12,282	11,411	11,411

+ * sig 1%, ** sig 5% , *** sig 10% Covariates included as in Table 2

Table 4 Assessment of Work Environment Estimates+ (t stats in brackets)

	POLS FE (MALE)	POLS FE (FEMALE)	POLS FE (MALE)	POLS FE (FEMALE)	POLS FE (MALE)	POLS FE (FEMALE)
	SKILL USAGE		JOB SECURITY		JOB FREEDOM	
Log wage hr	0.171*	0.133*	0.065	0.166*	0.155*	0.210*
	(3.42)	(2.81)	(1.11)	(4.69)	(3.27)	(4.21)
Log wrk hrs	0.029	0.153*	0.209*	0.077*	0.164**	0.079***
	(0.35)	(3.47)	(2.54)	(2.51)	(2.11)	(1.77)
Agency	0.044	0.055	-0.125***	-0.317*	-0.129**	0.005
	(0.64)	(0.76)	(1.79)	(5.26)	(1.95)	(0.07)
Casual < 35 hrs	-0.197*	-0.135**	-0.471*	-0.493*	0.013	-0.059
	(2.23)	(2.36)	(5.31)	(11.28)	(0.15)	(1.02)
Casual 35 – 40 hrs	-0.062	-0.126***	-0.552*	-0.693*	-0.117***	-0.186*
	(0.93)	(1.71)	(8.28)	(11.35)	(1.86)	(2.51)
Casual 41 + hrs	-0.125	0.108	-0.564*	-0.421*	-0.097	0.027
	(1.59)	(0.78)	(7.12)	(3.61)	(1.29)	(0.20)
Fixed < 35 hrs	-0.590*	-0.093	-0.540*	-0.507*	-0.223	0.128***
	(3.73)	(1.30)	(3.40)	(8.47)	(1.49)	(1.78)
Fixed 35 – 40 hrs	0.106***	-0.103***	-0.294*	-0.464*	0.044	0.010
	(1.79)	(1.79)	(4.94)	(9.18)	(0.78)	(0.17)
Fixed 41 + hrs	0.059	0.037	-0.099***	-0.388*	0.007	0.214*
	(0.99)	(0.49)	(1.65)	(6.09)	(0.13)	(2.82)
Perm < 35 hrs	-0.034	-0.091**	0.024	-0.034	0.082	0.024
	(0.37)	(2.03)	(0.26)	(1.00)	(0.95)	(0.53)
Perm 41 + hrs	0.119*	0.061	0.092*	0.005	0.039	0.094*
	(3.57)	(1.59)	(2.73)	(0.15)	(1.24)	(2.43)
R^2						
within	0.03	0.04	0.06	0.05	0.03	0.04
between	0.04	0.09	0.06	0.18	0.12	0.07
overall	0.04	0.08	0.05	0.15	0.10	0.06
F test $u_i =0$	0.00	0.00	0.00	0.00	0.00	0.00
Obs	10,799	10,283	10,799	10,283	10,799	10,283

+ * sig 1%, ** sig 5% , *** sig 10% Covariates included as in Table 2

Table 5 Wage Premium Estimates+ (t stats in brackets)

	MALES		FEMALES	
Log wrk hrs	-0.356*		-0.217*	
	(20.81)		(19.99)	
Agency	0.061*	0.061*	0.027	0.021
	(3.97)	(3.84)	(1.48)	(1.13)
Premium	6.3%	6.3%	2.7%	2.1%
Casual < 35 hrs	-0.156*	0.064*	-0.045*	0.111*
	(8.15)	(3.91)	(3.10)	(8.70)
Premium	-14.4%	6.6%	-4.4%	11.7%
Casual 35 – 40 hrs	-0.008	0.007	0.005	0.011
	(0.54)	(0.50)	(0.28)	(0.61)
Premium	-0.8%	0.7%	0.05%	1.1%
Casual 41 + hrs	-0.046*	-0.118*	-0.069**	-0.123*
	(2.61)	(6.64)	(2.11)	(3.70)
Premium	-4.6%	-11.1%	-6.7%	-11.6%
Fixed < 35 hrs	0.059***	0.220*	-0.024	0.079*
	(1.62)	(5.94)	(1.29)	(4.33)
Premium	6.1%	24.6%	-2.4%	8.2%
Fixed 35 - 40 hrs	-0.0004	0.0002	-0.013	-0.018
	(0.03)	(0.02)	(0.85)	(1.23)
Premium	-0.04%	0.02%	-1.3%	-1.8%
Fixed 41 + hrs	-0.068*	-0.138*	-0.073*	-0.117*
	(.01)	(10.25)	(3.79)	(6.02)
Premium	-6.6%	-12.9%	-7.0%	-11.0%
Perm < 35 hrs	-0.047**	0.101*	-0.036*	0.064*
	(2.30)	(5.19)	(3.12)	(6.00)
Premium	-4.6%	10.6%	-3.5%	6.6%
Perm 41+ hrs	-0.064*	-0.134*	-0.098*	-0.138*
	(8.33)	(18.89)	(10.05)	(14.07)
Premium	-6.2%	-12.5%	-9.3%	-12.9%
R^2				
within	0.19	0.15	0.14	0.10
between	0.16	0.19	0.13	0.15
overall	0.17	0.17	0.14	0.14
F test $u_i=0$	0.00	0.00	0.00	0.00
Obs	12,282		11,411	

+ * sig 1%, ** sig 5% , *** sig 10% Covariates included as in Table 2.

Table 6(a) Job Satisfaction Determinants (Normalised) Males and Females+ (t stats in brackets (), mean values in brackets [])

	POLS FE (MALE) PERM	POLS FE (MALE) CASUAL	POLS FE (MALE) FIXED	POLS FE (FEMALE) PERM	POLS FE (FEMALE) CASUAL	POLS FE (FEMALE) FIXED
Wage	0.114*	-0.002	0.139	0.096*	0.089**	0.169**
	(4.34)	(0.03)	(1.48)	(3.65)	(2.14)	(1.95)
	[0.086]	[-0.519]	[0.099]	[0.112]	[-0.346]	[0.060]
Wrk hrs	-0.026	0.064	0.019	-0.093*	0.036	-0.063
	(0.80)	(1.15)	(0.14)	(2.72)	(0.92)	(0.68)
	[0.187]	[-1.229]	[0.145]	[0.296]	[-0.960]	[0.241]
Job Security	0.207*	0.248*	0.120**	0.180*	0.123*	0.250*
	(14.66)	(4. 59)	(2.35)	(10.14)	(3.70)	(4.91)
	[0.129]	[-0.658]	[-0.164]	[0.215]	[-0.466]	[-0.381]
Job Uses Skills	0.071*	0.171*	0.144*	0.091*	0.029	0.098
	(4.95)	(3. 55)	(2.68)	(5.18)	(0.88)	(1.55)
	[0.059]	[-0.467]	[0.157]	[0.103]	[-0.367]	[0.164]
Job Freedom	0.144*	0.126**	-0.104	0.113*	0.092*	0.213*
	(10.50)	(2.29)	(1.45)	(6.89)	(2.68)	(3.37)
	[0.025]	[-0.237]	[0.124]	[0.052]	[-0.203]	[0.124]
R^2						
within	0.08	0.15	0.07	0.06	0.05	0.16
between	0.17	0.13	0.04	0.15	0.11	0.13
overall	0.16	0.16	0.04	0.12	0.10	0.14
F test $u_i =0$	0.00	0.00	0.00	0.00	0.00	0.00
Obs	8,589	1,239	971	7,125	2,165	993

+ * sig 1%, ** sig 5% , *** sig 10%.

Table 6(b) Job Satisfaction Determinants (Normalised) Males and Females+ (t stats in brackets (), mean values in brackets [])

	POLS FE (MALE) PERM	POLS FE (MALE) CASUAL	POLS FE (MALE) FIXED	POLS FE (FEMALE) PERM	POLS FE (FEMALE) CASUAL	POLS FE (FEMALE) FIXED
Wage	0.127*	0.013	0.130	0.107*	0.103**	0.180**
	(4.76)	(0.15)	(1.33)	(3.96)	(2.35)	(2.03)
	[0.086]	[-0.519]	[0.099]	[0.112]	[-0.346]	[0.060]
Wrk hrs	-0.023	0.063	0.003	-0.092*	0.029	-0.029
	(0.70)	(1.12)	(0.03)	(2.62)	(0.71)	(0.30)
	[0.187]	[-1.229]	[0.145]	[0.296]	[-0.960]	[0.241]
Tenure	-0.359*	-0.475	-0.165	-0.374*	-0.254***	-0.637*
	(6.32)	(1.34)	(0.61)	(6.74)	(1.74)	(2.73)
	[0.121]	[-0.568]	[-0.219]	[0.167]	[-0.376]	[-0.259]
Tenure sq	0.251*	0.796***	0.100	0.239*	0.276***	0.534**
	(4.56)	(1.65)	(0.39)	(4.78)	(1.84)	(2.20)
	[0.081]	[-0.370]	[-0.164]	[0.118]	[-0.259]	[-0.204]
Job Security	0.206*	0.260*	0.111**	0.178*	0.132*	0.235*
	(14.43)	(4.78)	(2.11)	(9.72)	(3.78)	(4.52)
	[0.129]	[-0.658]	[-0.164]	[0.215]	[-0.466]	[-0.381]
Job Uses Skills	0.068*	0.155*	0.154*	0.094*	0.032	0.104
	(4.74)	(3.19)	(2.77)	(5.19)	(0.96)	(1.62)
	[0.059]	[-0.467]	[0.157]	[0.103]	[-0.367]	[0.164]
Job Freedom	0.146*	0.132**	-0.114	0.119*	0.096*	0.207*
	(10.52)	(2.40)	(1.53)	(7.07)	(2.67)	(3.21)
	[0.025]	[-0.237]	[0.124]	[0.052]	[-0.203]	[0.124]
R^2						
within	0.09	0.15	0.07	0.07	0.06	0.18
between	0.14	0.11	0.02	0.10	0.10	0.12
overall	0.13	0.13	0.03	0.08	0.10	0.13
F test $u_i =0$	0.00	0.00	0.00	0.00	0.00	0.00
Obs	8,589	1,239	971	7,125	2,165	993

+ * sig 1%, ** sig 5% , *** sig 10%.

Table 7 Job Quality Indices

(a) Without Tenure

	PERMANENT	CASUAL	FIXED
FEMALES			
SUM (Hours neg)	0.037	-0.085	-0.055
SATW	0.007	-0.026	-0.009
MALES			
SUM (Hours neg)	0.023	-0.130	0.014
SATW	0.008	-0.066	0.001

(b) With Tenure

	PERMANENT	CASUAL	FIXED
FEMALES			
SUM (Hours and tenure neg)	0.020	-0.044	-0.032
SATW	0.001	-0.007	0.018
MALES			
SUM (Hours and tenure neg)	0.010	-0.065	0.018
SATW	0.003	-0.016	0.003

(c) Without Tenure Part-time and Full-time

	Part-time		Full-time	
	PERMANENT	CASUAL	PERMANENT	CASUAL
FEMALES				
SUM (Hours neg)	0.125	-0.022	-0.020	-0.449
SATW	0.011	-0.024	0.033	-0.039
MALES				
SUM (Hours neg)	0.150	0.058	0.033	-0.307
SATW	-0.008	-0.071	0.001	-0.053

Appendix I: Workplace Satisfaction Question in the HILDA Person Questionnaire

E36   I now have some questions about how satisfied or dissatisfied you are with different aspects of your job.

If not currently employed: These questions refer to the most recent job you were working in the last 7 days.

I am going to read out a list of different aspects of your job and, using the scale on SHOWCARD 36, I want you to pick a number between 0 and 10 to indicate how satisfied or dissatisfied you are with the following aspects of your job. The more satisfied you are, the higher the number you should pick. The less satisfied you are, the lower the number.

a   Your total pay
b   Your job security
c   The work itself (what you do)
d   The hours you work
e   The flexibility available to balance work
     and non-work commitments
f   All things considered, how satisfied are
     you with your job?

Table A1 Summary Statistics

	MALE			FEMALE		
	PERMANENT	**CASUAL**	**FIXED**	**PERMANENT**	**CASUAL**	**FIXED**
Overall						
Hourly Wage	22.88	17.71	24.32	17.97	17.37	19.85
	(10.69)	(8.64)	(13.66)	(7.93)	(8.67)	(8.42)
Weekly Hours	44.79	33.07	44.61	36.18	21.03	35.90
	(9.3)	(14.66)	(10.23)	(10.97)	(11.82)	(12.32)
Overall Job	7. 53	7.15	7.62	7.72	7.70	7.62
Satisfaction	(1.73)	(2.16)	(1.71)	(1.75)	(1.96)	(1.75)
Pay	6.94	6.60	7.09	6.82	7.08	6.74
Satisfaction	(2.04)	(2.42)	(2.06)	(2.24)	(2.39)	(2.33)
Hours	7.09	6.90	7.17	7.35	7.29	7.21
Satisfaction	(2.10)	(2.38)	(2.03)	(2.1)	(2.42)	(2.20)
Obs	9,641	1, 516	1,125	7,828	2,489	1,094
Part-time						
Overall Job	7.40	7.11	7.72	7.81	7.72	7.8
Satisfaction	(1.89)	(2.25)	(2.14)	(1.85)	(1.92)	(1.84)
Pay	6.50	6.48	6.80	6.70	7.04	6.68
Satisfaction	(2.28)	(2.42)	(2.51)	(2.33)	(2.39)	(2.34)
Hours	7.35	6.64	7.44	7.81	7.26	7.70
Satisfaction	(2.26)	(2.52)	(2.19)	(2.13)	(2.44)	(2.13)
Observations	9,641	1,516	1,125	7,828	2,489	1,094

Appendix Table A2 Variable List and Definitions

Variables	
Satisfaction/Assessment	
Overall Job Satisfaction	Overall how satisfied are you with your job? Scale 1 - 10
Pay Satisfaction	How satisfied are you with your total pay? Scale 1 - 10
Hours Satisfaction	How satisfied are you with the hours you work? Scale 1- 10
Skill Assessment	I use many of my skills and abilities in my current job Scale 1 - 7
Security Assessment	I have a secure future in my job Scale 1 - 7
Freedom Assessment	I have a lot of freedom to decide how I do my work Scale 1 - 7
Personal Characteristics	
Married / *de facto*	Individual is either married or living in a *de facto* relationship
No Long Term Health Problems	Individual has no long term health problems
Age 16-20	Individual is aged between 16 and 20 years
Age 21-25	Individual is aged between 21 and 25 years
Age 26-30	Individual is aged between 26 and 30 years
Age 31-35	Individual is aged between 31 and 35 years
Age 36-40	Individual is aged between 36 and 40 years
Age 41-45	Individual is aged between 41 and 45 years
Age 46-50	Individual is aged between 46 and 50 years
Age 51-55	Individual is aged between 51 and 55 years
Age 56-60	Individual is aged between 56 and 60 years
Age 61-65	Individual is aged between 61 and 65 years
Education	
Masters & Ph. D	Individual highest qualification level attained – Masters/Doctorate
Post-graduate Dip. & Cert.	Individual highest qualification level attained – Post-Graduate Diploma or Certificate
Degree	Individual highest qualification level attained – Degree
Diploma	Individual highest qualification level attained – Diploma
Certificate	Individual highest qualification level attained – Certificate
Year 12	Individual highest qualification level attained – Completed Year 12 in high school
Year 11 or less	Individual highest qualification level attained – Completed Year 11 or less
Work	
Permanent (35-40 Hours)	Individual on a permanent contract working an average of 35-40 hours a week
Permanent (< 35 Hours)	Individual on a permanent contract working less than 35 hours a week on average
Permanent (> 40 Hours)	Individual on a permanent contract working more than 40 hours a week on average
Fixed-Term (35-40 Hours)	Individual on a fixed-term contract working an average of 35-40 hours a week
Fixed-Term (< 35 Hours)	Individual on a fixed-term contract working less than 35 hours a week on average
Fixed-Term (> 40 Hours)	Individual on a fixed-term contract working more than 40 hours a week on average
Casual (35-40 Hours)	Individual on a casual contract working an average of 35-40 hours a week
Casual (< 35 Hours)	Individual on a casual contract working less than 35 hours a week on average
Casual Contract (> 40 hours)	Individual on a casual contract working more than 40 hours a week on average
Agency	Individual on an agency contract
Log of Hourly Wage	The log of hourly wage (continuous variable)
Tenure – Current Employer	Tenure (in years) in current occupation (continuous variable)
Tenure – Current Employer Squared	Tenure (in years) with current employer squared (continuous variable)
Log of Weekly Hours	The log of average weekly hourly worked (continuous variable)
Workplace Characteristics	
Public Sector	Individual works for an employer in the Public Sector
Small Firm	Individual works for an employer that employs less than 20 people
Medium Sized Firm	Individual works for an employer that employs between 20 and 99 people
Large Firm	Individual works for an employer that employs 100 or more people
Union Member	Individual belongs to a union
Supervisory Responsibilities	Individual's work includes supervising other employees
Occupation	
Managerial	Individual is in a managerial level occupation
Professional	Individual is in a professional level occupation
Associate Professional	Individual is in an associate professional level occupation
Trade Work	Individual is in a trade level occupation
Advanced Services	Individual is in an advanced services level occupation

Intermediate Services	Individual is in an intermediate services level occupation
Intermediate Production	Individual is in an intermediate production level occupation
Elementary Work	Individual is in an elementary level occupation
Labour Work	Individual is in a labour level occupation
Industry	
Agriculture	Individual works in the agricultural, forestry and fishing industry
Mining	Individual works in the mining industry
Manufacturing	Individual works in the manufacturing industry
Power	Individual works in the electricity, gas and water supply industry
Construction	Individual works in the construction industry
Wholesale Trade	Individual works in the wholesale trade industry
Retail Trade	Individual works in the retail trade industry
Retail Services	Individual works in the accommodation, cafes and restaurants industry
Transport	Individual works in the transport and storage industry
Communication Services	Individual works in the communication services industry
Finance & Insurance	Individual works in the finance and insurance industry
Business Services	Individual works in the property and business services industry
Government	Individual works in the government administration and defence industry
Education	Individual works in the education industry
Health Services	Individual works in the health and community services industry
Cultural Services	Individual works in the cultural and recreational services industry
Personal Services	Individual works in the personal and other services industry
Geographical Location	
Non-City	Individual resides in a regional or rural area
City	Individual resides in a major metropolitan area
Victoria	Individual resides in the state of Victoria
New South Wales	Individual resides in the state of New South Wales
South Australia	Individual resides in the state of South Australia
Queensland	Individual resides in the state of Queensland
Western Australia	Individual resides in the state of Western Australia
Tasmania	Individual resides in the state of Tasmania
NT	Individual resides in the Northern Territory
ACT	Individual resides in the Australian Capital Territory

Unless otherwise stated, these are dummy, and not continuous variables