

Who Cares about Job Security?*

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Abstract

This paper draws on responses to two job security questions in the World Values Surveys administered in Australia and New Zealand in the 1990s and 2000s in order to identify the degree to which people prioritise and otherwise attach importance to job security. While most people regard job security as an important aspect of any job only about a quarter prioritise 'a safe job' above other attributes. In order to identify who cares about job security the two indicators of subjective job security are modelled as a function of people's education, income, age, and employment status. Not surprisingly, those who care most about job security are those with limited formal education, low incomes, poorer health and older age. However, the degree to which security concerns differ between the most and least vulnerable is relatively small. This reflects the fact that almost all workers are subject to both temporal and spatial variations in labour demand as well as the fact that non-economic factors such as a person's level of risk aversion can also influence how any given objective measure of job security is appraised subjectively.

Keywords: Insecure work, Subjective job security, Objective job security

JEL Classification: J28, J41, D81

1. Introduction

An implicit assumption in the literature on insecure or precarious work is that security is an attribute that is highly valued in the job – across the population, over time and space and from job to job. If we are to understand the adaptability and flexibility of

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labour we need to question this assumption and replace it with a better understanding of how, when and where job security matters to people. To date we have collectively assembled a large set of *objective* measures of job security but we still have only a limited idea of how people themselves appraise the security of their own job – when, where and to what degree. It is these *subjective* measures of job security which are the focus of this paper.

A recent literature, largely outside economics, has revealed marked variations in the way the likelihood of losing a job is perceived by the employed. Psychologists in particular have demonstrated how the anticipated effects of losing a job can be as great as the actual effects and that it is not simply the prospect of being made redundant that reduces mental and physical health and performance at work but changes in the nature and responsibilities of the job as well. This paper extends this literature by showing that concerns over job security are not confined to those currently in employment but are also shared by those outside the labour market. As such, concerns over security are likely to influence both the propensity to search, the types of jobs considered, where they are sought and by whom. As Andrew Clark's analysis of 7000 OECD based returns from the 1989 wave of the International Survey Program showed, job security is one of the top two primary influences on job satisfaction (the other being whether the job is interesting) (Clark, 1998, p.3). Kelly *et al.* in turn document the strong relationship between satisfaction with pay and job security (1998, p.4).

This paper begins by drawing a distinction between job security, employment security and income security. The first refers to confidence that the job (and associated pay and conditions) will last, whether or not the job has been secured or is being sought. The second refers to the confidence that employment in general will continue to be available. The third, income security, refers to the presence of safety nets should neither of the first two securities prevail. This net could include on-going employment of family members who share resources through to State guarantees of unemployment or other (e.g. disability) benefits.

The World Values Survey questions used below refer quite explicitly to *job* security – confidence in the continuation of present job or the job being sought. That *employment* security is also important, however, is evidenced by the sensitivity of responses to the job security question to changes in the macro economy as well as to differences in the size of local labour markets. That the institutional context may also matter is also suggested by the presence of difference between countries.

An inspection of the job security perceptions of the over five and a half thousand respondents to the Australia and New Zealand surveys shows that the vast majority of the population regard job security as important – regardless of whether they are employed or not. At the same time, while most of the adult population believe job security is important in a job, only about one quarter actually prioritise security above other job attributes such as its 'importance' or its level of pay.

The discussion that follows shows that job security concerns rise with age, and fall with education, health and income as well as varying with levels of aggregate demand and geographic context. However, these factors alone are not sufficient to account for the variance in *subjective* measures of job security because they are mediated by psychological considerations. We also need to know the importance

people attach to paid work itself and to recognise that levels of anxiety over objective measures of risk vary depending on the levels of trust people place in each other.

The paper is in eight sections. It begins with the objective evidence on job insecurity in Australia and New Zealand then turns in section 3 to the more recent literature on subjective job security. Four samples from the World Values Survey are then introduced in section 4, variations in security concerns are described and the independent variables are introduced in section 5. A logistic regression model is specified in section 6 and applied firstly to the prioritisation of security and then to the importance attributed to a job, section 7. The main results are summarised under conclusions, section 8.

2. Job security in Australia and New Zealand

There are various forms of job security at both the micro and macro level. The one that comes to mind and remains implicit in most discussion is the ability of employers to dismiss or lay off employees or put them on short time without great difficulty. Among the various macro indicators of job insecurity the most important and widely used is the unemployment rate itself. As such job insecurity is, 'situated between employment and unemployment, because it refers to employed people who feel threatened by unemployment' (de Witte, 2005, p.1).

Unemployment rates in New Zealand and Australian have followed a similar path over the last two and a half decades as figure 1 shows; rising markedly in the 1980s through to the middle 1990s then adjusting downwards in the long period of growth that ran through to the late 2000s after which rates rose again to hover between five and seven per cent. As has been observed recently, 'in the aftermath of the GFC both countries had increases in the rate of unemployment; and following that period the rate of unemployment has been stable in both countries' (Borland, 2014, p.17).¹

However, to the union movement in both countries this focus on numerical adjustment, on changes in the numbers employed, misses the point which is that insecurity also stems from changes in the characteristics of jobs, not just their number. While high and fluctuating levels of unemployment continue to reflect on-going volatility in the demand for labour, commentators in both countries have argued that this has been paralleled by a growing separation of high and low quality jobs. They suggest, following research by Kalleberg in the USA, that trends in job quality reflect two major processes: a polarisation of growing inequality in many job rewards and rising level of insecurity for all workers. Their central point is how polarised and precarious employment systems are not merely temporary features of the business cycle but represent structural transformations such that bad jobs are no longer vestigial but a central component of the U.S. employment (Kalleberg, 2011).

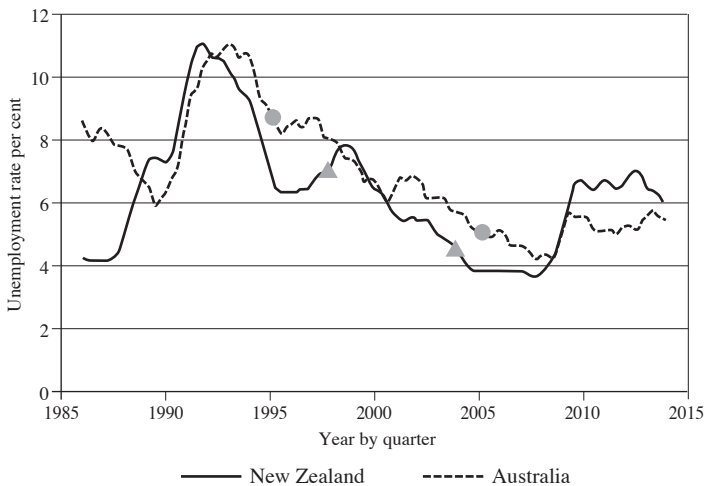
Such a viewpoint was echoed in the New Zealand CTU report released in October 2013 following the prior release of the Australian perspective (ACTU, 2012). Both documented what they saw as the human consequences of insecure work.

¹ The primary message of the Treasury study was that it was not structural change in the labour market which accounted for the rise in the country's unemployment rate but simply a changes in the rate of economic growth and hence that there were no impediments to the rate of unemployment falling back to the levels that existed in the mid-2000s.

‘At least 30 per cent of New Zealand’s workers – over 635,000 people – are in insecure work. We believe it may well cover 50 per cent of the workforce, 95,000 workers have no usual work time, 61,000 workers have no written employment agreement, 573,000 workers earn less than the Living Wage and almost a quarter of a million Kiwi workers say they have experienced discrimination, harassment or bullying at work. Whether we call it casualisation, precarious work, temporary, or non-standard work – it means that workers have worse conditions, less security, less pay and are more vulnerable. That may suit the boss – but it is unfair and does not work for workers.’ (NZCTU, 2013)

This conflation of the notion of job security with temporary and casual work and the quality of work has tended to muddy the waters. The likelihood of being laid off, the nature of the contract and the qualitative aspects of the work are quite different dimensions even if in some contexts they are correlated. Separating the distribution of the population over these dimensions is important for those concerned with monitoring subjective job insecurity and its consequences.

Figure 1 - Quarterly unemployment rate, New Zealand and Australia, 1986-2013



Note: The symbols ▲ and ● refer to the dates of the sample surveys analysed below.

Sources: New Zealand unemployment rate (Statistics New Zealand, Infoshare). Australia unemployment rate (Australian Bureau of Statistics).

The inference from Kalleberg's argument is that insecurity is increasing. While there is solid documentation of declining security in the 1970s and 80s in the USA (Valletta, 1999), several have taken issue with the argument of rising insecurity in the 1990s and beyond (Green, 2003 and Fevre, 2007) arguing in effect that jobs today are no less secure than they used to be. Certainly in New Zealand analysts have found it difficult to assemble evidence to the contrary (Brosnan and Walsh, 1997 and Dixon, 2010).

3. Subjective Job Insecurity

It is actually unnecessary to get caught up in debates over job quality, over manifold meanings of insecurity or indeed over related questions of job satisfaction. Instead the subjective insecurity literature is concerned with way job insecurity is felt and reported subjectively and how felt insecurity impacts on people's work related mental and physical health, as well as their labour market behaviour. Subjective job insecurity is therefore treated as a *psychological* construct, as, 'a subjectively experienced stressor which may be divided into different dimensions' (Sverke and Hellgren, 2002, p.24).²

At the same time, this literature is cognizant of the importance of market demand and inter country differences in setting objective conditions. Studies in Europe for example have identified significant cross-country differences in individual's perception of job security, over and above their institutional differences (Erlinghagen, 2008). Far less attention has been paid to spatial variations in labour demand within countries and the way levels of anxiety about job instability might vary with accessibility and settlement size for example. An indication of the possible role of location has been provided at a local level in Australia where multilevel regression estimates showed that areas with the lowest unemployment rates had significantly lower job insecurity (Milner and Kavanagh, *et al.*, 2014).³

In summary, the relatively recent literature on subjective insecurity has focussed attention on the way in which objective measures of job insecurity, such as the likelihood of being laid off, are subjectively appraised and can vary substantially over individuals facing similar objective circumstances. Among variables identified are those of age, education, health and education as well as psychological predisposition. Virtually all such studies focussed only on the employed however and little is known about the role of employment itself. Fortunately, the World Values Survey does not confine its questions on job insecurity to those currently employed.

4. The World Values Survey

The World Values Survey asks job security questions of the whole population across multiple countries.⁴ This paper draws on responses to the same survey instrument

² At least three reviews of this literature have been published: Sverke and Hellgren (2002), de Witte (2005) and Cheng and Chan (2008). For issues of measurement see Ashford (1989) and on related aspects of mental health see, Adam and Flatau (2006).

³ The outcome variable was self-rated job security and represented the summed combination of two variables: 'I have a secure future in my job' (rates from 1 to 7) and 'I worry about the future of my job' (rated from 1 to 7 reverse coded) (see, Milner, *et al.* 2014).

⁴ <http://www.worldvaluessurvey.org/wvs.jsp>

applied to residents of New Zealand and Australia in two different time periods.⁵ There are two questions which capture the relative weight people place on different aspects of potential jobs. The first asks the degree to which job security is prioritised in the job search and the second concerns whether security is a desirable attribute of a job or not.⁶

The first question elicits the priority respondents attach to having 'a safe job'.

Q26: Now a question about the things which would seem to you, personally, most important if you were looking for a job. Here are some of the things many people take into account in relation to their work. Regardless of whether you are actually looking for a job, which one would you, personally, place first if you were looking for a job? 1) A good income so that you do not have worries about money, 2) A safe job with no risk of closing down or unemployment, 3) Working with people you like, 4) Doing an important job which gives you a feeling of accomplishment, 5) Don't know. (The World Values Survey, 1998)

A follow-up question asks whether there might be a second priority, but those responses throw little additional light and are not considered any further in this paper.

The second question in the survey addresses the characteristics of jobs people consider important.

Q27: Here are some more aspects of a job that people say are important. Please look at them and indicate which ones you personally think are important in a job? [*Please tick all that apply*] 1) Good pay, 2) Not too much pressure, 3) Good job security, 4) A job respected by people in general, 5) Good hours, 6) An opportunity to use initiative, 7) Generous holidays, 8) A job in which you feel you can achieve something, 9) A responsible job, 10) A job that is interesting, 11) A job that meets one's abilities. (The World Values Survey 1998)

These two questions will be referred to as the 'priority' and 'importance' questions respectively. Table 1 summarises the proportion of positive responses given by the Australian samples in 1995 and 2005 and New Zealand samples in 1998 and 2004. These four dates are marked on the time series graphed in figure 1.

⁵ Another possible source of similar unit level information is the International Social Survey Program (ISSP) (www.issp.org) and several surveys of similar size run in both Australia and New Zealand could have been used to complement those used here from the World Values Survey. A preliminary inspection of the unit record files from the ISSP surveys administered at similar periods suggest similar results; higher levels of concern over job security in Australia for example. Also see, Kelly *et al* (1998). The Gallup Poll applies a similar instrument across a larger number of countries including Australia and New Zealand with samples around 1000 but unlike the World Value Survey or the ISSP surveys it is not freely available to researchers. See <http://www.gallup.com/strategicconsulting/127634/Income-Health-Wellbeing-Around-World-Evidence-Gallup-World-Poll.aspx>.

⁶ Questionnaires are available from <http://www.wvsevsdb.com/wvs/WVSDocumentation.jsp> Additional documentation is available at <http://www.wvsevsdb.com/wvs/WVSDocs.jsp?Idioma=I>

Table 1 - Responses to job security questions. New Zealand and Australian samples

	<i>“Safe job with no risk of closing down or unemployment’ is the most important aspect if I were looking for a job”</i>		<i>“Good job security is an important aspect of a job for me.”</i>	
	<i>New Zealand</i>	<i>Australia</i>	<i>New Zealand</i>	<i>Australia</i>
1990s	20.52%	23.71%	72.02%	58.69%
2000s	15.63%	23.27%	64.78%	Question not asked

Note: Sample sizes are as follows: New Zealand 1998 = 1201 and 2004 = 954; Australia 1995 = 2048 and 2005 = 1421.

Source: World Values Surveys.

Concern over job security is counter-cyclical; as growth declines concerns over job insecurity rises. Therefore the answers to both job security questions were higher in the 1990s when the demand for labour was falling than in the 2000s when it was rising.⁷ The differences between the two countries in this last respect are a little more complicated. When it comes to prioritising a ‘safe job’ over the alternatives presented, in the 1990s a quarter of the Australian sample ranked a safe job above other characteristics of the job compared to only a fifth of the New Zealand sample. A decade later when unemployment was lower and falling, fewer people indicated that job security was the most important aspect but the differences between the two countries were minimal: the proportion only fell by five per cent in the New Zealand case and five per cent in the Australian case, well within the survey standard errors.

When it came to the second question in the survey, the ‘importance’ question, column three and four of table 1 show that macro conditions again mattered. But this time, the country rankings were reversed. In the 1990s, seventy two per cent of respondents in the New Zealand case included job security in their list but only fifty eight point seven per cent of the Australian respondents did so. In the more buoyant 2000s a smaller proportion of New Zealand included employment security among their list of important attributes – just under sixty five per cent (compared to seventy two per cent in the 1990s). Unfortunately this particular question was dropped from the Australian 2005 survey (renamed the Australian Attitudes Survey) preventing comparisons with the New Zealand reduction in the second period.

Just because people say security is important in a job does not necessarily mean they will prioritise security over other attributes. However, while inclusion does not imply rank, a cross-tabulation of responses to the two questions did show that if

⁷ A similar relationship applies spatially where area unemployment rates in Australia are negatively related to the self-rated job security of the employed (Milner, *et al.* 2014). Their outcome variable from the HILDA survey was self-rated job security and represented the summed combination of two variables: ‘I have a secure future in my job’ (rated from 1 to 7) and ‘I worry about the future of my job’ (rated from 1 to 7 reverse coded). These two measures have also been used in previous studies of job insecurity (LaMontagne, *et al.*, 2013). Other examples of surveys of existing employees about the security of their current job conducted over three periods in Australia include Kelley, *et al.* (1998) and McGuinness and Wooden (2009).

someone gives security their highest priority the chances are very high that they will also include it as an important attribute of their job; the proportion of such a joint response was over 90 per cent in the New Zealand case and over eighty per cent in the single Australian case.

It is against this background of aggregate differences in subjective job insecurity that we turn to the micro level evidence. Of specific interest is how concerns over job security are distributed across the population.

5. Independent variables

The variables listed in table 2 have been constructed from the World Values Survey as arguments in two models, the first on who prioritises job security and the second on who recognises security it as an important attribute of a job. There are ten clusters or variable categories: age, gender, self-assessed health, education, income, labour force status, and a set of variables under the heading 'domestic'. The ninth category includes two measures of 'personality', one denoting whether (paid) work is very important to the respondent, and the other being the level of trust they have in others. The final variable captures the relative size of the local labour market in which the respondent lives and works.

All variables are binary except age. Some, like income and education represent different intervals within their ordinal scale and the base in such cases is highlighted in bold. The base of all variables has been designated on the expectation that each will positively correlate with the dependent variable, and hence, that they will be associated with greater job insecurity. The categories which make up the value ranges outside the base are therefore expected to show lower odds of job insecurity. For example, there are several accounts of men being more sensitive to job security issues than women and for this reason it is the male category that has been set as the base and women are expected to return lower odds ratios. The expectation going into the results therefore is that most estimated coefficients will be negative.

With the exception of the rather curious absence of labour market variables in the 2004 New Zealand sample all variables are present and, as table 2 shows, there is a considerable similarity in the characteristics of the samples in the two countries in both periods. Average age tends to rise from the 1990s to 2000s as one would expect in an aging population and the proportion with an 'upper education' also rose over the period because the proportion entering tertiary education was rising in both countries (see notes under table 2). The rise in labour demand over the decade is reflected in the proportion in fulltime employment, the propensity for work to be important and for trust in others to rise. Other variables such as subjective evaluation of health and the distribution of subjects over labour market size showed relatively less systematic change.

The structure of missing values in the World Value Survey samples for the two countries and periods are shown in the right four columns of table 2 as departures from the total sample size listed at the base of each column. In the absence of an explicit non-response or 'don't know' code, the proportion of missing values for each variable denote their response rates and while these rates vary by question on the whole they are quite high. The exception of course is income where close to 10 per cent of respondents were unwilling or unable to supply usable answers.⁸

⁸ This structure of missing values was not considered serious enough to apply missing value interpolation.

Table 2 - The mean values of independent variables used in models of subjective job insecurity. New Zealand and Australia

Categories	Variable	Mean values				Missing values			
		NZ98	NZ04	Aust95	Aust05	NZ98	NZ04	Aust95	Aust05
Age	Age	47.44	49.25	42.58	50.45	-18	-21	0	-3
Gender	Male	0.45	0.45	0.49	0.45	-5	-16	0	-2
	Female	0.55	0.55	0.51	0.55	-5	-16	0	-2
Health	HVery_Good	0.37	0.37	0.36	0.28	0	0	-1	-1
	HGood	0.42	0.45	0.43	0.48	0	0	-1	-1
	HFair	0.17	0.16	0.16	0.19	0	0	-1	-1
	HPoor_VPoor	0.04	0.02	0.05	0.04	0	0	-1	-1
Education	UpperEdu	0.36	0.49	0.34	0.55	-45	-17	-32	-20
	MiddleEdu	0.24	0.45	0.40	0.30	-45	-17	-32	-20
	LowerEdu	0.41	0.06	0.26	0.15	-45	-17	-32	-20
Income	Inctthird1	0.31	0.26	0.46	0.45	-109	-106	-231	-104
	Inctthird2	0.34	0.30	0.26	0.27	-109	-106	-231	-104
	Inctthird3	0.35	0.43	0.28	0.28	-109	-106	-231	-104
Labour	FulltimeSE	0.45	.	0.42	0.47	-16	.	-10	-18
	Parttime	0.15	.	0.15	0.14	-16	.	-10	-18
	Retired	0.20	.	0.21	0.27	-16	.	-10	-18
	HousewifeSO	0.12	.	0.22	0.08	-16	.	-10	-18
	Unemployed	0.08	.	0.00	0.03	-16	.	-10	-18
Domestic	Notchwage	0.50	0.51	0.42	0.53	-89	-61	0	-91
	Maritaln	0.75	0.76	0.66	0.75	-22	-25	-6	-6
	Nochild	0.22	0.22	0.35	0.24	-20	-24	-6	0
Personality	Wklessimp	0.52	0.63	0.49	0.64	-60	-54	-22	-59
	Trust	0.49	0.51	0.40	0.48	-35	-44	-23	-10
Local labour markets	Small NZ, Australia	0.31	0.29	0.15	0.22	-44	-11	-2	-87
	Medium NZ, Australia	0.22	0.22	0.36	0.42	-44	-11	-2	-87
	Large NZ, Australia	0.47	0.50	0.48	0.36	-44	-11	-2	-87

Source: World Values Surveys.

Variable definitions: **Age** refers to those 18 and over. The **Health** question asks, 'All in all, how would you describe your state of health these days? The **HPoor_VPoor** option of the five was set as the base. The education categories available in the World Values Survey include six levels for New Zealand: (1) inadequately completed elementary education, (2) completed (compulsory) elementary education, (3) incomplete secondary school (compulsory) elementary education and basic vocational qualification. These first three categories are followed by (4) complete secondary school: secondary, intermediate vocational qualification, (5) some university without degree/higher education degree-lower-level tertiary certificate, and (6) university with degree/higher education – upper-level tertiary certificate. The responses for the Australian sample are coded to the same categories but the secondary school level is further separated into 3 and 4 technical/vocational type. For the purpose of comparison analysis I have folded the additional two Australian categories into the composite categories used in the New Zealand sample. The result is the threefold classification **UpperEdu**, **MiddleEdu** and **LowerEdu**. The marital status question '**Maritaln**' identifies those who are not married, living together or widowed. The '**Nochild**' variable indicates those who answered 'no' to 'Do you have any children?'.

Table 2 - The mean values of independent variables used in models of subjective job insecurity. New Zealand and Australia (Variable definitions continued)

The variable '**Wklessimp**' refers to those who did answer 'Very Important' to the question on how important was work in your life. The employment status variables break down into **Fulltime** (30 hours+ per week) including Selfemployed, **Parttime**, **Retired**, **HousewifeSO** (housewife/home duties and student plus other) and **Unemployed**. **Notchwage** refers to those in the household who were not the chief wage earner. **Inctthird1** identifies the first four tenths of the countries income distribution in the relevant survey wave, **Inctthird2** to the following three tenths and **Inctthird3** to the last three tenths. The local labour markets variables **Llmsmall**, **medium** and **large** are defined separately for New Zealand and Australia. In the New Zealand case 'small' refers to farm or rural + village + small town, 'medium' to large town and small city, and 'large' to medium city and large city (100k+). In the Australian case **Llmsmall** refers to settlements of 10,000 population or less, **Llmmedium** to 10<500,000 and **Llmlarge** to 500,000 or more.

6. The model and estimates

The following logistic regression model is applied separately to the two job security questions in each of the four samples, the first to the 'priority' question and the second to the 'importance' question.

$$S_i = \alpha + \beta_i A + \beta_i G + \beta_i H + \beta_i E + \beta_i I + \beta_i L + \beta_i D + \beta_i P + \beta_i M + \varepsilon_i \quad (1)$$

The dependent variable S_i is the subjective measure of job *in*security recorded by the i th respondent in the respective country and period. In the 'priority' question, S equals 1 if the respondent identified 'a safe job' as a priority when looking for a job and 0 otherwise. In the 'importance' question, S equals 1 if job security was deemed an important attribute of a job and 0 otherwise.

Terms on the right hand side of equation (1) refer not to individual variables but to categories of variables as these are identified in table 2 above. So for example A refers to the age variables as they later appear in tables 3 and 4, G to gender, H to health, E to education, I to income, L to labour, D to domestic, P to personality and M to the local labour market variables.

The results of applying the logistic regression in (1) to all four samples are presented in table 3. Recall that variables were ordered under implicit hypothesis that the base category would be most likely to exhibit the higher level of job insecurity and therefore the estimated coefficients should all be negative. By and large this presumption is borne out by the results and the majority of signs are negative across all four samples.⁹ This consistency notwithstanding, few of the estimated coefficients are statistically significant, particularly in the two smaller New Zealand samples. The Australian samples are almost double the size and this largely accounts for the rise in the instance of statistical significance. What is important therefore is the sign and magnitude of the coefficients.

⁹ The correlation between corresponding estimates in the two New Zealand samples is 0.47 and between the two Australian samples, 0.79. The two country samples from the 1990s are correlated much more closely (0.50) than those in the 2000s (-0.13) with the cross country cross period correlation even lower (0.10). Although the centred age variables and local labour market size are specific to the sample in which they appear they are sufficiently similar to compare in this way.

Table 3 - Conditional estimates of the odds of prioritising job security over other attributes in the job and job search. New Zealand and Australia

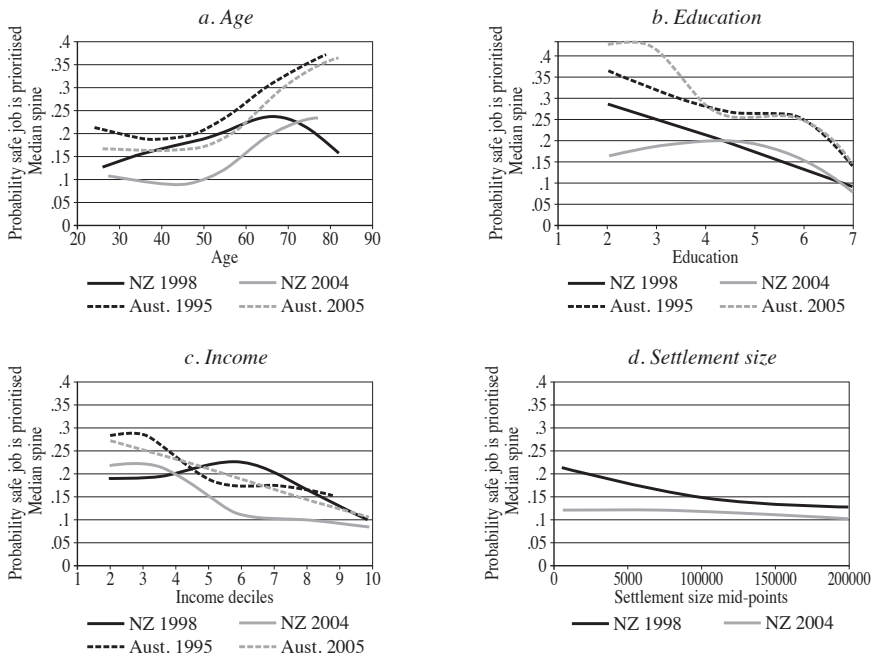
Category	Variable	NZ 1998	NZ 2004	Aust. 1995	Aust. 2005
Age	Agecnz98	0.004			
	Agec2nz98	0.000			
	Agecnz04		0.004		
	Agec2nz04		0.000		
	Ageca95			-0.003	
	Agec2a95			0.000	
	Ageca05				-0.007
	Agec2a05				0.000
Gender	Female	-0.055	-0.473	-0.135	0.115
Health	HVery_Good	-0.250	-1.020	0.098	0.472
	HGood	-0.156	-0.489	0.246	0.561
	HFair	0.551	-0.140	-0.049	0.584
Education	MiddleEdu	-0.039	0.431	-0.189	-0.434
	UpperEdu	-.934***	-0.199	-.948***	-1.02***
Income	Incthird2	0.258	-0.427	-.368*	-0.037
	Incthird3	-0.247	-0.482	-.473*	-.69**
Employment	Parttime	0.134	.	-.572**	-0.279
	Retired	-0.141	.	-0.293	0.423
	HousewifeSO	-0.013	.	-.623**	-0.278
	Unemployed	-0.393	.	.	-0.084
Household	Notchwage	0.329	0.431	-0.065	0.139
	Maritaln	-0.044	-0.062	0.154	0.030
	Nochild	0.409	0.320	-0.086	0.004
Personality	Wklessimp	-.41*	-.506*	-0.044	-0.281
	Trust	-.532**	-0.380	-0.113	-0.231
Local labour market - NZ	LlmNZ98R32	0.490			
	LlmNZ98R33	-0.143			
	LlmNZ04R32		0.346		
	LlmNZ04R33		0.227		
Local labour market - Australia	LlmA95R32			0.220	
	LlmA95R33			0.057	
	LlmA05R32				0.014
	LlmA05R33				0.037
	Constant	-0.702	-0.701	-0.613	-0.871
Statistics	N	782	616	1721	1102
	r2_p	0.095	0.082	0.049	0.067
	chi2	73.4	40.0	92.8	76.7
	df_m	21	17	20	21
Significance	p<0.05 *	p<0.01 **	p<0.001***		

Source: World Values Surveys.

Before turning to the detailed results in tables 3 and 4 the reader may wish to glance at the median probabilities post-estimated from the regressions in figures 2 and 3. These graphs are median splines (band 5) fitted through the probabilities (as opposed to odds ratios) calculated from each column of coefficients in table 3. As such they depict the way in which the chances of prioritising job security change with age, education, income and settlement size. The interpretation to follow refers to the estimated odds ratios in the tables and the probabilities in the figures.

The influence of age on perceived job insecurity has proved ambiguous in the wider literature (Erlinghagen, 2008, p.186). The OECD (1997) observed a decline with age while others detected a rise (Naswall and De Witte, 2003), while others were unable to detect any influence (Green, Dickerson, *et al.*, 2001). The majority of studies however seem to agree with Erlinghagen’s multilevel research on European countries which showed that, ‘older workers over 40 years of age are more affected by job insecurity than younger workers’ (Erlinghagen, 2008, p.189). The reason is the perceived difficulty of securing another position at an older age and certainly one with the same level of remuneration or known duration.

Figure 2 - Post-estimated median probabilities that job security is prioritised in the job and job search by age, education, income and settlement size. Australia and New Zealand



Source: World Value Surveys.

With respect to the age variables in table 3, therefore, the expectation was that job security would be given greater priority with age. In three of the four samples this was indeed the case as figure 2a shows – with the additional suggestion of a U shape. (Age had been centred with the sample specific mean in order to reduce the multicollinearity present when the quadratic is used). The particular instance of New Zealand in 1998 turned out to be unusual (although not unprecedented in the literature) for chances of priority being attached to job security rises then falls with age (in cross section). As we identified in table 1, Australian residents were more likely to prioritise job security and this is reflected in the relative placement of the Australian series in the probability plots of figure 2.

Turning to the impact of gender, recent studies do not find any gender-specific effect with regard to job security at least among those already in employment (OECD, 1997; Green, Dickerson, *et al.*, 2001). From the results in table 3, however, we see that being a female lowers the odds of prioritising job security compared to males in three of the four samples, suggesting indeed that males do prioritise higher job insecurity even if the degree varies by sample.

While health has received a lot of attention in the subjective job security literature the primary concern has been over health as an outcome of job insecurity rather than as a possible source of insecurity although the relationship is likely to be two way. Poor health can generate anxiety for a number of reasons including concerns over job performance and perceived difficulties of rehire. Expectations with respect to health were that better health would be associated with a lower prioritisation of job security, however, this negative relationship only holds in the New Zealand samples. The 2005 Australian sample shows only a minor effect of increasing health on the odds of prioritising job security. The direction of causation remains ambiguous in all cases.

When it comes to labour force status, those employed fulltime were expected to exhibit high levels of insecurity on the assumption that the opportunity costs involved in losing a job were higher. While those least connected with the market did show lower insecurity (the retired and those involved in domestic care) those in part time work did not. Already quite insecure by virtue of their status, the unemployed showed considerably less insecurity than those fully employed, a result which gives some credence to the loss aversion thesis.

Levels of education and skill level have featured prominently in studies of subjective job security (Greenhalgh and Rosenblatt, 1984; Ashford, Lee, *et al.*, 1989). As Cheng and Chan noted, manual employees react more strongly to insecurity because these employees generally have lower levels of education and skills and are more dependent on their current jobs (Cheng and Chan, 2008, p.276). In the Australasian case, the effect of education is quite strong and clear. In three of the samples the chances of job security being prioritised in the job or job search falls by about 25 per cent between the lowest and highest educational qualification. The exception is New Zealand in 2004 where vulnerability rises then falls against the seven category classification but there is no clear reason for this unusual result.

Subjective levels of job insecurity also vary by relative social and economic rank, as apparent in Europe (Naswall and de Witte, 2003). As de Witte notes, ‘job insecurity is a good reflection of an individual’s real (or ‘objective’) chances and position on the labour market, despite its subjective nature’ (de Witte, 2005, p.2). Although not reported here, the New Zealand and Australian evidence strongly support

the propensity of self-identified class to correlate with concern over job security.¹⁰ Partly for this reason the notion of job insecurity has been widened elsewhere to cover what is referred to as *socio-economic* insecurity (Mau, *et al.*, 2012).

More consistent results apply to the relationship between the priority given job security and income. As figure 2c shows, in all four samples those in the top income decile were about 25 per cent less insecure than in the second decile. (The unusual case this time is New Zealand in 1998 where the chances of prioritisation grew slightly past the middle of the income distribution and only fell after that.)

Labour force status had the fully employed as the most likely to prioritise job security primarily on an opportunity cost basis and the results over the three samples available offer some support. The 'housewife' and unemployed categories both showed a weaker tendency to prioritise job security probably because other factors were more pressing, such as income and possibly because individuals with certain characteristics come in with low expectations about such jobs being available.

On a similar basis chief wage earners were, by virtue of that status, expected to have the most to lose and, therefore, behave in a risk averse way. However, this argument was not strongly supported. Nor were expectations about the security of marriage for there is little evidence that those not in partnerships were any more likely to prioritise job security. Having no children also failed to support a risk averse position and Erlinghagen argues that 'job insecurity can be expected to vary as the significance of an individual's income for the family's likelihood increases and because of children and parents in particular are likely to react more sensitively to a threat to their employment situation than those without children. There was also little support for the supposition 'that a precarious household financial situation heightens perceived job insecurity, since the potential loss of a job becomes a threat to the family's very livelihood'. (Erlinghagen, 2008, p.184-5)

The expectation that those for whom work was not very important were less likely to prioritize security was supported, and similarly those who could trust others most of the time were also less likely to prioritise job security, possibly in the belief that their employer would look after their best interests.

When modelling subjective measures it is appropriate to also include personality traits. Research shows that traits of locus of control and negative affectivity are associated with perceived job insecurity because this reflects the degree to which people are predisposed to risk (Hartley, *et al.*, 1991; Sverke, *et al.*, 2004; de Witte, 2005). Hartley has argued that in its most general sense, (subjective) job insecurity as a construct, reflects the discrepancy between the level of security a person experiences and the level he or she prefers (Hartley, 1991). The other trait which has received considerable attention is trust. Relevant studies are reviewed in Cheng and Chan and they support the findings here of a negative relationship between concern over job insecurity and trust (Cheng and Chan, 2008, p.283).

Finally we turn to the role of settlement size – a relatively neglected argument in the subject job security literature. Larger denser markets offer both job seekers and those seeking labour greater choice. Our corresponding expectation was that labour market size would lower the chances of prioritising job security particularly during economic downturns which tend to weaken smaller and geographically isolated labour markets as capital seeks the protection of larger metropolitan regions (Morrison, 2005).

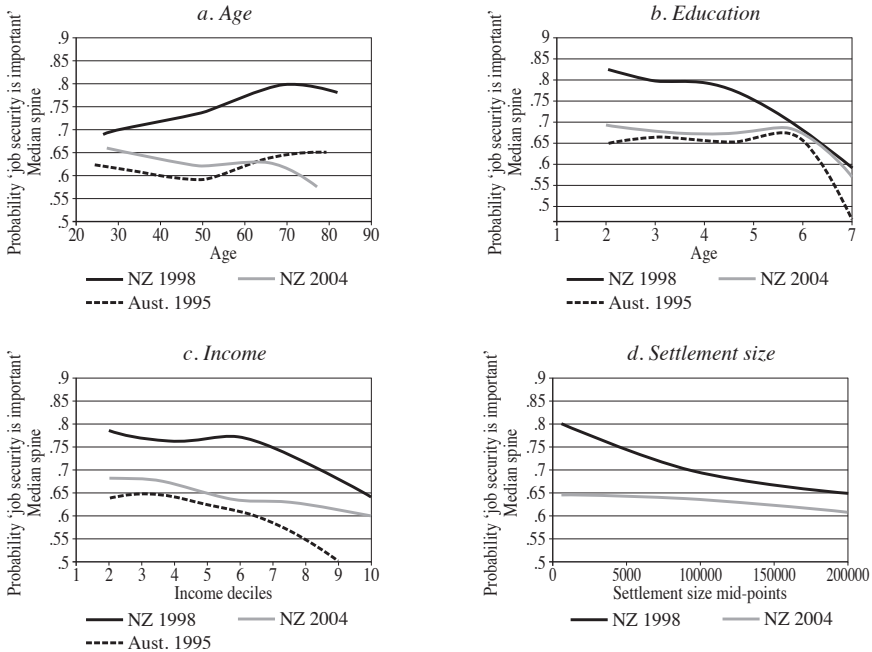
¹⁰ Details are available from the author on request.

The New Zealand case is graphed in figure 2d and, as expected, in the recession of the 1990s there was a stronger negative relationship between job security concerns and the size of the respondent's local labour market. In 2004, by contrast, the economy was growing again and no such geography of job insecurity was apparent. A similar result held for Australia with the size of local labour market gradient much steeper in the 1990s than ten years later.

7. The 'importance' question

The proportion of the population who attach importance to job security greatly exceeds those who give it top priority among listed job attributes, a feature noted in table 1. Nevertheless, the importance accorded security varies with the attributes of individuals just as 'priority' does, table 4. In this case, however, only the 1995 Australian sample is available.¹¹ When it comes to 'importance' people's attributes have a less dramatic impact. Job security is more likely to take on greater importance with age in only one sample, New Zealand in the 1990s although the general shape is replicated in the Australian sample 2004 as shown in figure 3.

Figure 3 - Post-estimated median probabilities of the importance accorded job security in the job and job search by age, education, income and settlement size. Australia and New Zealand.



Source: World Values Survey.

¹¹ The correlation between the estimates across the three samples in case of this 'importance' variable is similar to those of the 'priority' question. In the case of the two New Zealand sample estimates $r=0.50$ and between the two countries in the 1990s, $r=0.65$. As in table 3 the estimates are least similar when both the country and the year is different, $r=-0.27$.

Table 4 - Conditional estimates of the odds of declaring job security important in the job and job search. New Zealand and Australia

<i>Category</i>	<i>Variable</i>	<i>NZ 1998</i>	<i>NZ 2004</i>	<i>Aust. 1995</i>
Age	agecnz98	-0.008		
	agec2nz98	0.000		
	agecnz04		-0.007	
	agec2nz04		0.000	
	ageca95			-.0105*
	agec2a95			0.000
Gender	Female	-0.036	0.068	-0.015
Health	HVery_Good	-0.201	-0.272	0.151
	HGood	-0.264	-0.339	0.140
	HFair	0.361	-0.152	-0.039
Education	MiddleEdu	0.036	-0.384	0.018
	UpperEdu	-.777***	-0.790	-.656***
Income	incthird2	0.070	-0.084	0.012
	incthird3	-0.051	-0.073	-0.227
Employment	Parttime	0.013	.	-.375*
	Retired	0.129	.	-0.013
	HousewifeSO	0.079	.	-0.231
	Unemployed	-0.099	.	.
Household	notchwage	-0.203	0.144	0.039
	maritaln	0.016	-0.071	0.013
	nochild	-0.366	0.120	-.459**
Personality	wklessimp	-0.222	-0.091	-.219*
	trust	-0.301	-0.463	-0.128
Local labour market - NZ	llmNZ98R32	0.238		
	llmNZ98R33	-.37*		
	llmNZ04R32		0.392	
	llmNZ04R33		0.132	
Local labour market - Australia	llmA95R32			-0.021
	llmA95R33			-0.229
	_cons	1.91***	1.62	1.02**
Statistics	N	888	694	1735
	r2_p	0.066	0.027	0.038
	chi2	70.2	25	88.4
	df_m	21	17	20
Significance	p<0.05 *	p<0.01 **	p<0.001***	

Source: World Values Surveys.

The effect of gender and health on whether job security is important or not is very similar to the priority it is accorded, with the main difference occurring between poor and fair health. An inspection of the education results show a very clear effect of tertiary (upper) education in reducing the importance people attach to job security but with less magnitude and strength compared to the prioritisation case (figure 2). Again the most marked impact was to be found in the New Zealand in the late 1990s.

Similar results apply to income. Those in the top third of the income distribution were less likely to say job security is important, a difference of about 15 per cent from the second to tenth decile. The employment measures and those associated with the household are less clear, with the magnitudes and signs showing a lack of consistency across the samples. The results for work attachment and trust, follows the previous results in figure 2. And finally when we look at the effect of settlement size in New Zealand we see again that settlement size helps relieve job security.

7. Conclusions

One could argue, looking over a long period of human history, that it is not job insecurity that is new but job security and that the security many enjoyed for few brief decades after the Second World War in a relatively small set of developed economies was historically and geographically quite unusual. What makes that experience relevant today is the expectations it created and the sense of entitlement those particular historical conditions generated not only in the countries involved but worldwide. It is clear from this paper however that not everyone carries this same sense of entitlement nor are they equally sensitive to the degree of permanence of their job.

Despite several decades of research related to job security in Australia and New Zealand few have addressed people's *perception* of their own job security – other than indirectly through measures of job satisfaction with which it is inverse correlated. The World Values Surveys conducted in Australia and New Zealand in the 1990s and 2000s asked two quite specific questions: about the priority job security assumes in people's employment decisions and the degree to which security is important in a job per se. From a random sample of the adult population in the two countries (both inside and outside the labour force) this paper has shown that between eighty and ninety per cent of the population include job security among the attributes they most value in a job although only a quarter actually prioritise security above the list of other attributes the job could have (such as its importance or receiving a good income).

Several factors were found to be to be particularly important in determining who places security above other attributes and these were similar in both countries. The first is education. Those with only elementary education are one fifth more likely to prioritise job security than those with a tertiary qualification. Consistently, the higher the income the less job security matters in the job and job search – after controlling for education and age in cross section. As the international literature has shown, security concerns rise with age and they are higher for those for whom work is a very important part of their lives, and for those who are less trusting of others.

A further set of factors affecting job security concerns are external to the individual, the country itself, the size of the local labour market within the country and the state of the national labour market at the time of the survey. Security concerns are

higher in Australia overall, even though the relative importance of individual attributes differ little from the New Zealand case. Security is accorded greater priority in small settlements within each country due to their relatively fewer employment opportunities and greater volatility. As is well documented elsewhere, security concerns rise as the demand for labour weakens and is therefore positively correlated with the country's unemployment rate. Security concerns were therefore strongest in both countries when the demand for labour was relatively low, in 1990s, but fell when by the 2000s when the labour market was relatively buoyant.

While corresponding closely to the overseas evidence these conclusions based on the Australian and New Zealand evidence remain tentative. One of the limitations of the study, which it shares with others in the field, are the measures of security themselves. As has been noted elsewhere in the subjective insecurity literature, 'job insecurity has been measured in an *ad hoc* manner, often with single items, scales with unknown psychometric properties, or measures devoid of theoretical basis'. At the same time, 'this is hardly surprising given that conceptual work on the topic dates back only to the mid-1980s' and the pioneering work of Greenhalgh and Rosenblatt, (1984) (Sverke and Hellgren, 2002, p.27).

In addition to concerns over the use of a single scale of job security there is the issue of conceptual clarity. One could argue for example that job security in the World Values Survey questions is insufficiently well defined and that the alternative dimensions in the priority question are incomplete. One might also wonder how to judge 'importance' in the second question on security analysed above. One might instead want to differentiate between cognitive job insecurity (likelihood of job loss) and affective job insecurity (fear of job loss) as did Borg and Elizur (1992).

As is the case more generally, cross sectional surveys have a number of deficiencies although the use here of what amounts to a two year synthetic panel using four samples has at least helped in identifying the influence of temporal as well as spatial variation in labour demand on security concerns. Extending the analysis by pooling the four samples is a possibility in future work. Being able to draw on a longitudinal sample would also help of course through the ability to control for individual fixed effects. It would be instructive for example to be able to observe the ways in which people's employment security concerns, both inside and outside the labour market, changed with external shocks both at the macro local and domestic level. So far monitoring job security concerns longitudinally has only covered those already in employment rather than the population as a whole.

In the meantime, this study has highlighted the difference between objective and subjective measures of job insecurity, shown how subjective concerns vary across the micro domains of age, education and income as well as highlighting the role of the spatial. It has also shown that inter country differences can prevail in aggregate even though the micro drivers remain remarkably similar.

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