Fears and realisations of employment insecurity

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ABSTRACT

We investigate the validity of subjective data on expectations of job loss and on the probability of re-employment consequent on job loss, by examining associations between expectations and realisations. We find that subjective expectations data reveal private information about subsequent realisations both of job loss and of subsequent re-employment. We also compare the use of verbal and numerical descriptors for subjective probability scales. As predictors of subsequent job loss, the expectations data perform better with numerical than with ordinal verbal descriptors. On average, employees overestimate the chance of losing their job; while they underestimate the difficulty of job replacement. We recommend that survey items on employment insecurity should be explicit about each risk under investigation, and utilise a cardinal probability scale with discrete numerical descriptors.

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1. Introduction

What can be learned from workers' expectations about employment and unemployment? In this paper we evaluate indicators of the subjective expectations underpinning employment insecurity. From studies in the US and the UK it is found that expectations of job loss predict subsequent unemployment, albeit with some error and showing a degree of pessimism (Stephens, 2004; Campbell et al., 2007). However, the relation between subjective expectations and unemployment outturns could be spuriously positive, or conversely underestimated, if personality traits affect the chance of job loss and also the perception of the risk of job loss. We address this problem by estimating a model with fixed effects, with results similar to those in the literature, using data from Germany and Australia (countries with dissimilar labour market institutions). In all cases a rise in the perceived chance of job loss successfully predicts a rise in the probability of unemployment, but the marginal effect is considerably less than one. What is hitherto unknown is whether workers can also predict subsequent replacement conditional on job loss. We investigate this issue, and find that there is robust criterion validity in the data on workers' expectations of job replacement. In contrast

to their expectations of job loss, workers' expectations of job replacement reveal evidence of unwarranted optimism.

We also address whether the predictive power of job loss expectations data may be affected by the wording of the question, in particular the response scale. A cardinal scale on the risk of job loss, in which respondents are asked to state the probability of job loss, has considerable attractions for economists (Manski, 2004), but might not correspond to the categories individuals use when thinking about job loss probability. Some surveys instead deploy less precise ordinal descriptors (such as 'very unlikely', 'unlikely', ...), which rely on assuming respondents have a shared and internally consistent understanding of terms, and restricts comparisons to ordinal rankings. Yet there is hitherto no evidence as to which approach elicits the most information about expectations. Taking advantage of a decision to change the scale in an otherwise consistent series on expectations of jobs loss, we compare the predictive power of a cardinal scale with that of an ordinal scale. We find, not only that the cardinal scale has criterion validity, it also appears to do somewhat better than the ordinal scale.

These matters appear especially relevant, given that direct subjective indicators of economic expectations are increasingly finding favour within economics as valuable tools for predicting well-being and behaviour (Manski, 2004). Earlier studies have examined and supported the validity of expectations data in various other domains (Hurd and McGarry, 2002; Smith et al., 2001; Hamermesh, 1985; Dominitz, 1998; Manski, 2004). Attaining good measures of subjective

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employment insecurity would seem to be pressing, and not just for their predictions of subsequent labour market status. Perceived job insecurity and a lack of employability have been found to generate anxiety and substantially lower the well-being of workers and their dependents, to inhibit consumer spending, and to reduce wage growth (Wichert, 2002; Benito, 2004; Lusardi, 1998; Carroll et al., 2003; Campbell et al., 2007; Di Tella et al., 2003; Green, 2011). The impact of insecurity accounts in part for the highly detrimental effects of aggregate unemployment on the average well-being of populations. Nevertheless, the effects of employment insecurity vary across socio-economic categories, and between countries with different employment protection institutions; and this variation highlights the need for the different expectations behind feelings of employment insecurity to be more precisely specified in survey questions (Clarke and Postel-Vinay, 2004; Green, 2006, 2009). Employment insecurity comprises multiple parts, involving the risk of job loss, the chances of not finding another job, loss of income while unemployed, and uncertainty over job content. Unambiguously phrased survey instruments to capture each of these elements of uncertainty are needed, together with tested protocols to allow respondents to represent their expectations as reliably as possible. Our focus in this paper is on the first two categories. The world-wide economic downturn in 2008 serves to add some urgency to this task.

The paper proceeds as follows. The next section reviews measures of employment insecurity in some prominent national and international surveys, considers arguments and evidence about the use of probabilistic or ordinal scales when measuring expectations, and connects our study to investigations within psychology of pessimism and optimism. Section 3 describes the data, the main findings are presented in Section 4, and Section 5 concludes with a discussion of the implications for survey question design and for employment insurance.

2. Issues in the measurement of employment insecurity

The concept of employment insecurity refers to all forms of welfare-reducing uncertainty surrounding employment. It encompasses job insecurity (uncertainty over the continuity of the current job), uncertainty over the work itself, and uncertainty over future labour market prospects. This broad definition is often simplified in analysis to focus on two components of the mean expected welfare loss arising from the uncertainty: the probability of job loss and its cost (including non-pecuniary losses). The latter depends on out-of-work benefits and on the uncertainty over the quality of, and time taken to find, another job. In attempting to best capture employment insecurity, survey items typically focus on expectations over the two uncertainties: the probability of job loss, and the probability of finding another equally good job.

Thus, the work orientations module of the International Social Survey Programme (ISSP) of 1989, 1997 and 2005 asks for the extent of agreement/disagreement with the statement: 'My job is secure'. We surmise that this instrument mainly captures the risk of job loss, but its meaning is imprecise and the response scale is not commensurate with capturing degrees of risk interpreted as probability. The second uncertainty can be phrased in terms of probabilities, but is sometimes framed as a degree of difficulty. For example, the ISSP asks: 'How difficult or easy do you think it would be for you to find a job at least as good as your current one?'. The Finnish Quality of Work Life surveys are of interest because they also tap uncertainty about the work itself (for example the fear of transfer to another set of tasks), but they allow only binary responses (Lehto and Sutela, 2009). Less satisfactory still is the approach in the European Community Household Panel which asks 'How satisfied are you with your present job in terms of job security?'. Here, the question is open to different interpretations, not least because the degree of satisfaction also depends on comparison norms.

Good survey practice favours unambiguous questions, and since employment insecurity involves subjective expectations these should be measured. But, can these be measured validly? Manski (2004) makes a powerful argument for economists to directly measure expectations of future events. Rather than assuming an ideal process of expectations formation (usually 'rational') and then identifying decision processes from observed behaviour, Manski advocates combining choice data with self-reported data on perceived expectations. Respondents should be asked to report the perceived likelihood of an event happening. In respect of employment expectations this is the approach followed by, for example, the US General Social Survey, the Survey of Economic Expectations (SEE), the British Skills Surveys (BSS), and the British, German and Australian household panels,[1] and the 5th European Working Conditions Survey.

But how might respondents report that likelihood? A common procedure is to use an ordinal verbal scale such as 'no chance', 'very unlikely', 'unlikely', 'evens', 'quite likely', 'very likely' (e.g. in the BSS). Yet it is possible that these descriptors are not interpersonally comparable, if different individuals do not have a shared understanding of the descriptors. An alternative procedure is to use a probabilistic scale (as in the SEE). A cardinal ranking would mitigate the problem of interpersonal comparisons because the meaning of any given percentage is, in principle, objective. Moreover, a cardinal measure of risk is potentially more parsimonious as an explanatory variable in econometric analyses. Manski (2004) cites evidence that respondents are willing to make probabilistic judgements, and finds no indication of internal inconsistencies in these cases. We lack evidence, however, of whether cardinal measures of risk have a superior predictive power. The counter-argument is the assertion that respondents may not be capable of making reliable cardinal probability judgements. Even though they are willing to report subjective cardinal probabilities, these might not correspond with objective circumstances. Lukasiewicz et al. (2001) note the paucity of work validating scales of risk perception, and provide some evidence in favour of using verbal scales for measuring instantaneous perceptions of risk. Erev and Cohen (1990) report experimental evidence that verbal and numerical scales were equally efficient at conveying event probabilities, and that judgemental biases (wishful thinking and/or the conjunction fallacy) occurred independently of which kind of scale was used.

One issue to be investigated in this paper, therefore, is whether cardinal scales for questions on job loss expectations perform better than ordinal scales. An adjunct to this question concerns how to phrase the probabilistic scale. Options are to ask respondents to report probabilities using any integer from 0 to 100, to present single points on a coarser scale, or to present banded ranges.

To assess the content validity of subjective expectations data, one can first check whether they conform to a plausible model of expectations formation. The research is positive in this respect. Whether measured explicitly or implicitly in terms of subjective expectations, indicators of job loss track labour market tightness and fit a plausible model of how expectations are formed reflecting objective labour market factors such as the permanent/temporary status of the job contract, education level, prior unemployment experiences and other social encounters with unemployment (Schmidt, 1999; Green et al., 2000; Manski and Straub, 2000; Campbell et al., 2007; Stephens, 2004; McGuinness and Wooden, 2009; Green, 2009; Linz and Semykina, 2008).

The more stringent test of content validity, however, is to check how accurately the perceived expectations are realised. Comparing expectations with realisations, described as 'calibration' in the psychological literature on judgmental biases, two aspects are of interest, corresponding to the marginal and the average expectation. The subjective expectation acquires validity as a forecast to the extent that a

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[1] The British Household Panel Study only asked this question twice, in 1996 and 1997.