The Rise and Decline of Job Insecurity[1]

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October 2003

ABSTRACT

Job security is an important aspect of work quality. Accumulating evidence shows that insecurity has deleterious impacts on individuals and households, and in the mid-1990s, job insecurity became a public and political issue. This paper critically examines the concept and measurement of job insecurity and examines trends based on representative survey data in a number of industrialised countries. There is some evidence that insecurity increased in the 1970s and 1980s. However, perceived rising insecurity during the 1990s was a middle-class phenomenon based in part on the experience of professional workers and on the finance industry. In recent years, most occupation groups in Britain have experienced declining insecurity, reflecting a return to historically low levels of unemployment. Insecure workers are concentrated in jobs with temporary contracts and short job tenures, and in the private sector. Plant and Machine Operators remain especially insecure. Workers in foreign-owned firms are experiencing greater insecurity in recent years, and this link is associated with competition from low-wage economies.

JEL Classification: J2, J6.

Keywords: Job security, job insecurity, unemployment

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The Rise and Decline of Job Insecurity

1. Introduction

Those writers who dress the present and future world of work in the clothes of despair, or even just of pessimism and protest, sometimes run the risk of understimating the awfulness of the past. Such is the case when we look at the case of job insecurity – the subject of this paper.

Confidence in the continuity of and progress of employment is a core element in the quality of work. For most people who do paid work, the job is neither a daily tradable commodity, nor a comprehensive detailed labour contract, but a peculiar exchange relationship of variable and uncertain duration and loosely defined content. Since the realisation of personal potential, including the growth of skill, typically require time, jobs of short and uncertain duration are normally of low quality. So too are jobs where the work itself is pervaded with uncertainty. Even leaving aside the fear of redundancy and its consequences, uncertainty over how and where the employer will choose to deploy the workers' labour, or over whether existing wages will be maintained, or over the chances of access to training or promotion opportunities, can all reduce employees' welfare.[2]

These considerations are at the heart of the concept of job insecurity, in its relation to work quality. Job insecurity is not properly indicated by any single measure such as the absence of "jobs for life". In its broadest sense, job insecurity derives from the uncertainty surrounding future job characteristics, rewards and duration. It can vary in its extent and attendant implications for work quality. For most jobs the uncertainty is irreducible below a certain minimum and often beyond the workers' individual or collective control. Especially in an interdependent capitalist world, jobs are at the whim of the product market.

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[1] An earlier version of this paper was presented to the ESRC Seminar "Work Life and Time in the New Economy", Manchester University, 28th February, 2003.

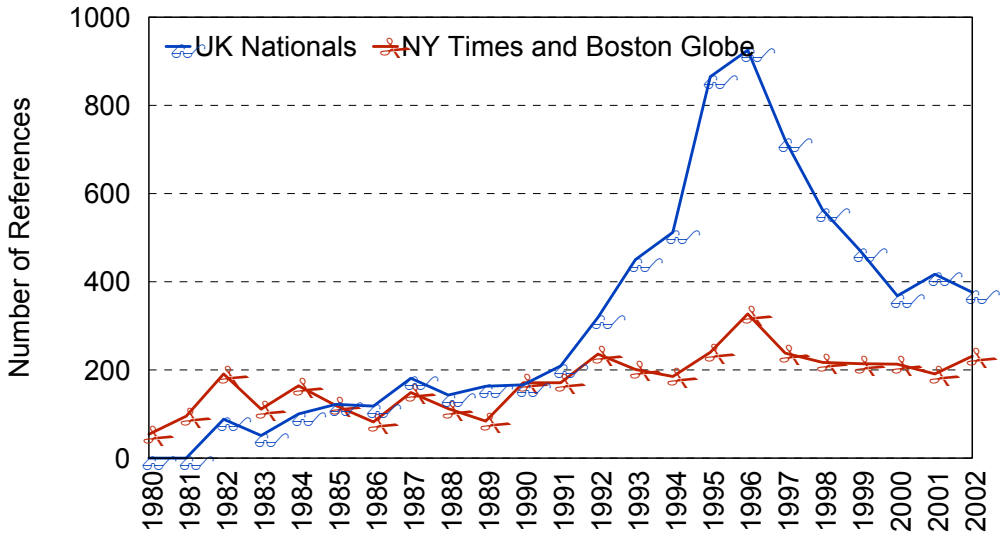
[2] Standing (1999) proposes a list of eight elements of job insecurity.

It follows that job security ought not to be regarded as a state of indefinite job tenure and nil uncertainty. Nor would such a state seem desirable. The main issue, therefore, is not the lack of attainment of some false ideal, but whether there has been change for the worse or better. There is evidence that undue insecurity generates severe psychological strains. Can it be maintained, as some have argued, that the quality of work life has been systematically undermined in the modern capitalist era by rising insecurity?

Can we also make sense of and evaluate the movement of popular interest in job insecurity? As can be seen in Figure 1, from 1990 the issue of job security and insecurity was increasingly the subject of press reports, both news items and commentaries on political debate. In the middle of the 1990s, the phrase 'job security' or 'job insecurity' occurred on average one and a half times every day in the UK national press. Is this explosion of concern with insecurity a reflection of a real change in the way that the system is operating? On the face of it, this concern is surprising in both its extent and timing, considering that insecurity is an endemic feature of economic life in a capitalist economy, and that the recent era of mass unemployment began a decade or two earlier. In the late 1960s, industrialised countries tended to have unemployment rates of approximately 3 percent, with a few exceptions such as Germany which had less than 1 percent. Rates crept up in the 1970s, then erupted in the early 1980s to peaks of 9.7 percent (US), 11.9 percent (UK), and 12.2 percent (Netherlands), then after much persistence returned by 2001 to 4.8 percent (both US and UK), and 2.7 percent (Netherlands). In other countries, unemployment also grew in the 1980s but peaked again much later, for example at 9.9 percent (Germany) and 12.4 percent (France) in 1997, and in 2001 remained high at 8.0 percent and 8.8 percent respectively.[3] So why were not the US and UK press more vocal on insecurity during the 1980s when real insecurity was worse than in the 1990s?

[3] Source: OECD *Labour Force Statistics* 1981-2001, Paris: OECD.

Figure 1 Press References to Job Security and Insecurity, 1980-2002.



Source: http://80-web.lexis-nexis.com.chain.ukc.ac.uk/professional/

Serious academic research has also been under way, especially from psychologists investigating the consequences for employees, and from socio-economists examining the changing labour market. A motivation for this accumulating literature is the view that product and labour markets are each undergoing a sea change in the modern era, driven by a combination of three deep and long-lasting related developments in the institutional structure of modern capitalism: the progressive globalisation and intensification of competition, the arrival and ubiquitous diffusion of radical information and communication technologies, and a deep transformation and subversion of the ideologies of the post-war Keynesian state. The latter phrase encompasses *inter alia* the decline and commercialisation of public sectors, the acceptance of mass unemployment in the 1980s, a widespread decline of trade union influence coupled with some retrenchment in employment protection regulations, and reforms to benefit systems. These widespread developments have hit different countries – and different types of capitalism (Hall and Soskice, 2001) – in different ways. In the United States changes in the workplace are attributed to competition from foreign models of capitalism, the government's relaxation of employment protection, to increasingly volatile product markets that demand in turn a numerically flexible labour market, and to a tranche of new management ideologies (Cappelli et

al, 1997). These changes are thought to have severely undermined the internal labour markets upon which part of the post-war US economy was constructed (Osterman, 1999). Similar pressures are recounted in the case of Britain (Gallie et al, 1998), but in addition labour market change is attributed to the commercialisation of the public sector (driven by fiscal constraints), the growth in stock market influence on managers' choices, reforms to the benefit system and the decline of trade unions from their previous position of considerable influence (Ladipo and Wilkinson, 2001; Heery and Salmon, 2000). In Germany, institutional reforms have been less widespread, but unemployment rates have soared. Though they have not converged on a liberal model of firm-level wage bargaining, other coordinated market economies have adapted their institutions of wage bargaining and have accommodated demands for flexibility in various ways (Thalen, 2001).

One prominent argument among economists about the source of labour market change attributes it directly to the arrival of new technologies. Another emphasises exposure to increased competition. A subset of the latter hypothesis is that the real culprit is competition from low-wage economies. In this view, insecurity would derive from fear of commercial failure due to intensified competition from cheap imports, or from fear of plant relocation to a low-cost area. In every case, the implication would be that lower skilled workers are more likely to be subject to increased security. There is a parallel here to debate about the reasons for decline in the relative economic fortunes of lower skilled workers in industrialised countries. According to one side of the debate, normally associated with trade theorists, the opening up of world manufacturing trade to low-wage economies triggered a substantive decline in the demand for low skilled workers, as economies moved from autarky to open trade (Wood, 1995). According to the other side of the argument, the primary shock derives from the introduction of new technologies that are skill-biased – ICT and biotechnology are the usual named causes. The argument is by no means simple, if only because technological change and global expansion of trade are interdependent.

A consequence of all these perspectives is that job security is thought to be less attainable in the industrialised world than in the 1950s, 1960s and early 1970s, when most economies experienced a "golden age" of stable growth, with high employment rates and low inflation. It is held, moreover, that the process is ongoing –

that even by the 1990s and beyond job insecurity was continuing to figure ever more strongly as a feature of modern capitalism. For some commentators upon the times in the middle of the 1990s, the decline in security came to epitomise the weakening of social democracy, and the ascendance of liberal capitalism (Elliott and Atkinson, 1998).

Whatever the cause, there can be little doubt that job insecurity has a substantial detrimental impact on the quality of jobs. In the economic perspective the disadvantage is plain to see if, as is likely, the uncertainty lies primarily on the downside: that is, the uncertainty lowers the average present value of current and future rewards. Even if the uncertainty has an upside, perhaps from promotion possibilities, such that the expected value of current and future rewards is no different from a case where jobs are secure, the wider distribution of potential future rewards is a reduction of welfare for the majority of workers who would normally be assumed to be risk averse. These economic notions are consistent with theoretical and empirical work in psychology. Uncertainty and ambiguity (a lack of "situational clarity") are argued, in psychological literature, to be theoretically related to stress. Part of the reason for this link is the idea that well-being is related to the workers' ability to foresee, control and especially to cope with negative events. An immensely important contribution of recent literature is that this link has now been widely confirmed empirically. Job insecurity is a substantive source of ill health and job dissatisfaction, has long-lasting impacts on individuals, and extends beyond insecure individuals to their households. In some studies, the effects of insecurity on well-being are found to be as great as or exceeding the impact of becoming unemployed.[4] A number of issues remain for further research. It will be useful, for example, when it becomes possible to delineate more accurately the role of the social support mechanisms at work in alleviating the effects of insecurity on well-being. Also of importance is the possibly distinctive effect of different elements of insecurity. Most research focuses on the impact of workers perceiving a risk of job loss, but also relevant is the cost of job loss.

In order, however, to make the case that the quality of work has been declining in the modern era because of the effect of insecurity, it would need to be established

[4] For reviews see Burchell (1994); Wichert (2002) or Nolan et al. (2000).

that there has been a genuine secular increase in job insecurity. And, while it could be legitimate to see the era of high unemployment that overcame many countries in the 1980s and 1990s as part of a long period or stage of capitalism, following the 'golden age' of stability of full employment for post-war capitalism, the espoused argument about insecurity tends to go further than this. It has been held that insecurity is increasingly a feature of work in the modern era, above and beyond unemployment itself. Empirical evidence accumulated to support this thesis has concerned estimates of the probability of redundancy, of the proportion of 'non-standard' work, the use of performance pay systems, the cost of job loss and workers' perceptions.

However, even a few years ago this evidence base was thought by some critics to be somewhat fragile (Godard, 1998). This paper contributes through a systematic re-examination of the evidence from the vantage point of both more years of data, and, crucially, data that is superior and with a broader geographical coverage, than was available to commentators of only a few years ago.

To investigate whether job insecurity is a *special* problem for modern capitalism, this paper addresses the following questions:

1. What valid and reliable ways exist for measuring the core elements of job insecurity in a consistent way over time?
2. Has there been a secular rise in average job insecurity in recent decades?
3. Has the distribution of job insecurity changed, and do the distribution and its changes reflect posited technological changes and/or global competition?
4. Finally, there is a subsidiary question, relevant as much to the sociology of knowledge as to the understanding of insecurity: do the changes in average security or its distribution match the interest in this topic?

To preview the paper's main punchline, I find the evidence now for the view that this is an especially insecure capitalist era to be distinctly unconvincing.

2. Measuring Insecurity

While a sense of job insecurity may derive either from economic aspects of a job or from the content of the work itself, I focus on the former, which is more amenable to measurement and likely to have considerable consequences for life

beyond the workplace. Even with respect to the economic aspects, however, the concept of job insecurity has a number of elements.

One can think of job insecurity as related to uncertainty over the present value, V, of a worker's income stream, which depends on both the current known wage rate, w, and uncertain future income from work or other sources, y_F:

$$V = f(w, y_F)$$

Because the income stream is uncertain, he/she will take a view as to the probability of various outcomes. One possible outcome, which we shall call $\overline{V}$, would be the norm as perceived by the worker, on the assumption that employment continues and regular normal wage increases materialise. However, the worker may fear that this norm will not be realised. A 'loss', i.e. a downward deviation from the norm, given by $v = \overline{V} - V$, can occur. The possible outcomes have a subjective distribution in the mind of the worker, which could be characterised by the mean and the variance of v. Then, a plausible characterisation of the concept of job insecurity (*JI*), as perceived in research and popular literature, proposes that job insecurity decreases with the mean, and increases with the variance, of the distribution of v: [5]

$$JI = g[E(v), \operatorname{var} v] \qquad g_1 < 0, g_2 > 0$$

We might say that a job is more insecure, either if something changes to make the expected loss of income greater, or if something happens to make future income more uncertain.[6]

This fairly general formulation implies that there can be a number of constituents of job insecurity, each of which can be regarded as contributing to a poor quality of work. Consider first the role of the expected loss associated with job insecurity, $E(v)$. One can characterise and decompose this argument in the function, by disaggregating the losses associated with job loss and those associated with job continuity:

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[5] Using conventional terminology $E(v)$, 'the expected value of v', is the mean value of its subjective distribution.

[6] This characterisation makes the concept consistent with standard assumptions in risk analysis. Nickell et al (2002) adopt a simpler interpretation of job insecurity which focusses only on the first argument of g().

$$Expected\ Loss = E(v) = (\Pi_{JL}) \times E(CJL) + (1 - \Pi_{JL}) \times \Pi_{WL} \times E(CWL)$$

where Π_{JL} is the perceived probability of losing the job; CJL is the cost of so losing the job in terms of foregone wages net of benefits while unemployed, and possibly lower wages in the next job; Π_{WL} is the probability of wage loss in the same job; and CWL the cost to the worker of such a wage reduction. The first expression is the expected loss of value from job loss, while the second expression is the expected loss of value resulting from wages being less than the norm. Thus, the expected loss (and hence job insecurity) can be seen as positively related to the four elements: the risk of job loss, the expected cost of job loss, the risk of wage loss and the expected cost of that wage loss.

Decomposition of the other argument in the insecurity function, the variance of *v*, is not so straightforward. However, it is a reasonable presumption that the same constituent elements are important. The risk of job loss, if it increases from zero to a comparatively small amount, will raise the dispersion of future income. The cost of job loss, also, will interact with the risk, to raise the dispersion. Similar considerations apply to the risk of wage loss.

While researchers have examined changes in all four elements, the risk and cost of job loss appear to be the most important practically (and have had the most attention from researchers), because the costs of job loss tend on average to exceed by an order of magnitude those associated with wage reductions. For most of what follows in this paper, I shall focus on these two elements. For many, the risk of job loss is the single most important element: if workers have no fear of job loss, they might be thought of as experiencing no job insecurity except through deviations of their wages from their expected norms. Sometimes, the risk of job loss is taken to be synonymous with job insecurity.

Since the uncertainty surrounding job loss concerns beliefs about the probability of a future event, the conceptually ideal measure is forward looking. Arguably the measure should also be subjective. How workers perceive the security of their own jobs is important for two main reasons: for the privileged information this gives about the objective risks they face and for the predictive value of the perceptions about subsequent behaviour or of affective well-being. In practice, objective measures of the *ex ante* risk of job loss would be hard to recover from

observations on behaviour, and hard to collect directly in a survey context. Direct subjective measures of expectations are, therefore, not only valid, but also the only practical measures of *ex ante* risk. Nevertheless, the reliability of instruments used to capture subjective expectations needs to be evaluated where possible.

An alternative way to measure the uncertainty is to compute *ex post* the frequency of events and to assume that protagonists compute the probability of experiencing an event using available information. By tracking event frequency one can impute the changing risks they face, on the assumption that *ex ante* the events were equally likely to be experienced by each member of the relevant population. Economists typically prefer this latter measurement strategy, owing to scepticism about the reliability of subjective data. *Ex post* measures are more easily collected as objective data – that is, data which do not rely on the accuracy of reports of survey respondents' expectations or attitudes, drawing instead on their reports of behavioural events, or else on administrative records. Yet, particularly in the area of job insecurity, measures of event frequency may not always be valid indicators of insecurity. For example, the members of an observed group need not all have an equal chance of job loss.

There is thus a balance of advantages between the closer conceptual validity of subjective measures and the potentially superior reliability of objective indicators. The ideal outcome of the research strategy will be a picture of change that is consistent across measurement approaches.

3. Perceptions of Insecurity.

In this section I describe the pattern of change in perceptions of job insecurity. The focus is primarily, though not exclusively, on the U.S., Britain and Germany, for which suitable data is available. Data sources are: for the U.S., the General Social Survey 1977-2000; for the U.K., SCELI, Employment in Britain, the 1997 Skills Survey, the 2001 Skills Survey; also the International Social Survey Project; for Germany, the German Socio-Economic Panel. All data sets are nationally representative, and identical questions are asked over time, thus permitting comparability.

3.1 Perceptions of Risk of Job Loss

To capture how workers perceive the risk of job loss, survey respondents in Britain were first asked: "Do you think there is any chance at all of your losing your job and becoming unemployed in the next twelve months?". Those responding yes were then asked: "From this card, how would you rate the likelihood of this happening?" where the card showed a five-point probability scale. I combine the responses into a single variable, the Job Insecurity Scale, ranging from 0 ("no chance" to 5 ("very likely"). In the U.S., respondents were asked one direct question: "Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off – very likely, fairly likely, not too likely, or not at all likely?". In Germany, respondents were asked: "How probable is it in the next two years that you will lose your job?", and could answer on the scale: Definitely, Probable, Probably Not, Unlikely.[7]

While the validity of these instruments for capturing the risk of job loss is not in question, their reliability might be doubted. The responses could be biased and/or randomised through the psychological state of respondents or their relationship to interviewers which might generate, for example, a social esteem effect.[8] Accordingly, reliability checks are desirable. Two pieces of evidence support the view that responses to these instruments contain reliable information.

First, respondents' perceived risks of job loss and unemployment turn out to be related as expected to objective factors that ought to inform those perceptions. The fear of unemployment is found to be negatively correlated with industry employment growth, and/or the local labour market environment, with a worker's previous unemployment experience, and with having a temporary job contract (see Green et al, 2001, and the evidence below).

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[7] Unfortunately the scale was changed slightly in 1998 to: Definitely, Probably, Probably Not, Definitely Not. In fact this made no obvious break in the series. After 1998, the question and scale were both substantially altered, and comparisons are of no use.

[8] Multi-dimensional instruments for measuring job insecurity have also been tested, but I am looking only at instruments that are available for representative surveys over time.

Table 1 Job Loss by Prior Fear of Job Loss

Percent having an unemployment spell.

Perceived Likelihood of Job Loss and Unemployment	All Employed	Employed Men	Employed Women
No chance, very or quite unlikely	4.9	4.9	5.0
Evens	13.4	12.2	15.7
Quite likely	19.8	16.7	22.9
Very likely	38.1	38.6	37.5

Data Source: 2001 Skills Survey and postal follow-up.

Second, yet more compellingly, fears of unemployment are correlated as expected with subsequent experience. In the case of the 2001 Skills Survey, respondents were re-contacted between 12 and 15 months after interview, and asked whether they had experience a spell of unemployment in that period. Table 1 gives the findings. It is unequivocal that the greater the perceived risk, the greater the proportion that experience unemployment. Whereas, among those perceiving that there was no chance of unemployment or that it was unlikely, just 5 percent subsequently experienced unemployment, among those who feared that job loss and unemployment was very likely the subsequent experience confirmed this fear for 38 percent of respondents. Men and women appear to be equally adept at predicting their chances of job loss. These findings are consistent with those noted in Green et al. (2001), using a similar instrument for perceived risk of job loss. Moreover, the perceived risk of job loss turns out to be a good predictor of future unemployment even after controlling for all objective observable factors. We can reasonably conclude that, in stating their perceptions of job loss risk, respondents are making use of private information not otherwise revealed to researchers.

Changes in the Average Risk of Job Loss

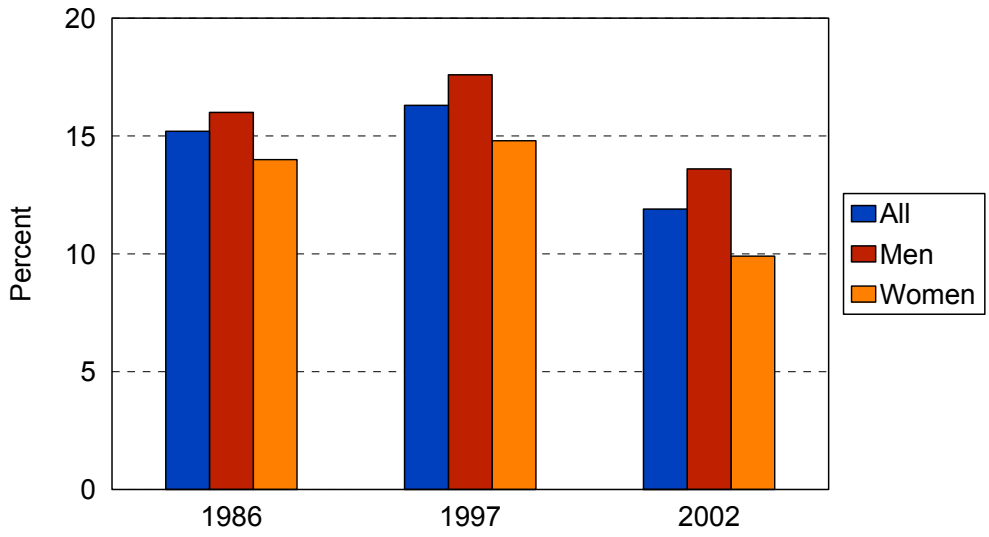
Figure 2 and Table 2 show responses on the Job Insecurity Scale at three time points. Over the whole period 1986 to 2001 there has been a decline in the perceived risk of job loss in Britain. If we call the top three response points ("evens" or greater) as "high job insecurity", it can be seen that the proportion of all workers in Britain experiencing high job insecurity fell from 15.2 percent to 11.9 percent. This statistically significant fall matches, in direction at least, the decline in aggregate unemployment from 11.2 percent to 3.4 per cent (claimant count method), and is therefore expected. Moreover, in each year, women's perceived risk of job loss is less than that of men, also consistent with their relative unemployment rates.

The picture in the intervening year, 1997, is notable. Despite the fact that aggregate unemployment in Britain had by then fallen to 5.8 per cent, there was no statistically significant difference between the perceived risks of job loss in 1986 and 1997. Indeed, the point estimate of the proportion experiencing high insecurity in 1997 was slightly higher, at 16.3 per cent. In previous work (Green et al, 2001), this finding led my co-authors and myself to suggest that between 1986 and 1997 there may have been a shift in the relationship between the perceived risk of job loss and the unemployment rate. The subsequent, statistically significant, fall in perceived insecurity casts some doubt on the strength of that conclusion.[9] The relatively high insecurity recorded in 1997 is linked in part to the changing distribution of insecurity (see below), which in turn may have been linked to the shake-out of particular sectors of the economy in the early 1990s (especially finance).

[9] The statistical relationship between perceived risk of job loss and local unemployment rates is positive as expected, but too loose to establish whether the perceived risk has fallen by less than could be predicted by that relationship.

Figure 2 Perceived Risk of Job Loss, Britain, 1986, 1997 and 2001

Proportion of workers experiencing high insecurity



Notes and Source: see Table 5.2.

Table 2 Job Insecurity Scale, by Sex, 1986, 1997 and 2001 in Britain

Likelihood of Job Loss	All Employed			Employed Men			Employed Women		
	1986	**1997**	**2001**	**1986**	**1997**	**2001**	**1986**	**1997**	**2001**
No chance	80.0	77.1	83.4	77.1	73.7	79.9	84.0	81.4	87.8
Very unlikely	1.3	1.3	1.0	2.0	1.9	1.4	0.3	0.6	0.5
Quite unlikely	3.5	5.2	3.7	4.9	6.8	5.1	1.7	3.3	1.9
Evens	6.6	9.2	5.9	7.3	10.9	7.2	5.7	7.2	4.4
Quite likely	4.0	3.5	3.1	3.9	2.8	3.3	4.0	4.2	2.9
Very likely	4.6	3.6	2.9	4.8	3.9	3.1	4.3	3.3	2.6
National Unemploy-ment Rate	11.2	5.8	3.4	13.3	8.1	4.8	8.4	3	1.7

Base is all those in work, aged 20-60.

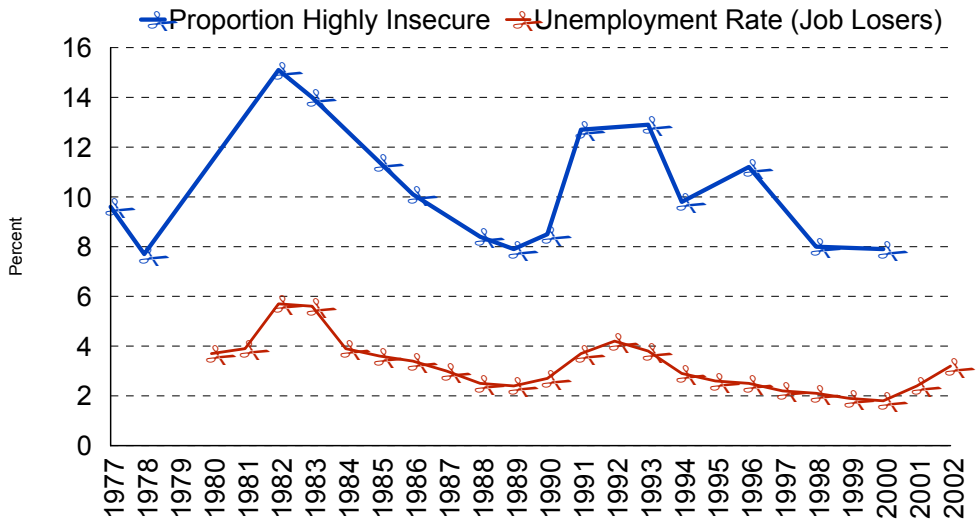
Data Source: Social Change and Economic Life Initiative, 1986 and Skills Surveys, 1997 and 2001; NOMIS

The picture of perceived risk of job loss in the United States, shown in Figure 3, is somewhat similar but covers a longer period. Those workers responding that they were fairly or very likely to lose their job were categorised as experiencing high job insecurity. The mean proportion of workers reporting high job insecurity was 8 percent in 1978. The proportion rose sharply in the early 1980s recession, fell, then rose again in the 1990 recession. By the end of the decade (prior to the collapse of the dotcom boom) it had fallen again to 8 percent. The rise and fall is approximately synchronised with the cycle of the unemployment rate; the lower line in the diagram

plots the proportion of workers unemployed through job loss. As with Britain, it has been hypothesised that during the mid-1990s the perceived risk of job loss was relatively high, compared to the aggregate unemployment rate (Schmidt, 1999). However, the subsequent fall up until the end of the decade casts doubt on that conclusion also. In fact the confidence intervals around the means in the GSS remain relatively large, a consequence of its quite small sample size, and therefore no definitive judgement can be made as to whether the fear of unemployment has increased relative to the actual experience of unemployment.

Figure 3 Perceived Risk of Job Loss, United States, 1977-2000

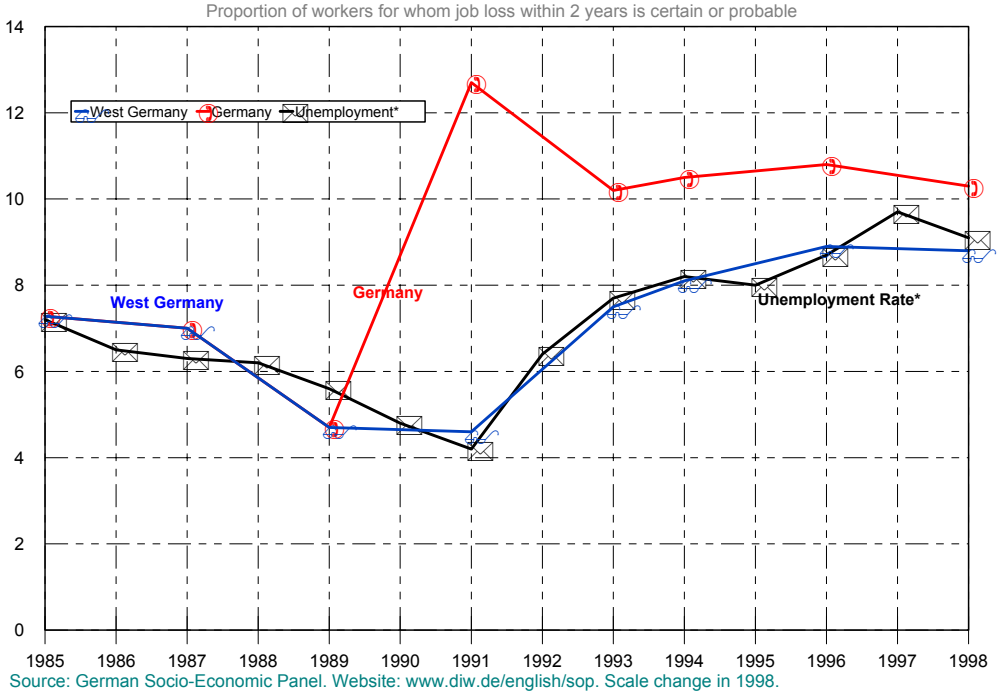
Proportion of workers likely or very likely to lose job in coming year.



Source: GSS 1977-2000. Website: http://www.icpsr.umich.edu:8080/GSS/homepage.htm
Base: Full-time or part-time employed, aged 18 and over.

Figure 4 Perceived Risk of Job Loss, Germany

Proportion of workers for whom job loss within 2 years is certain or probable



Source: German Socio-Economic Panel. Website: www.diw.de/english/sop. Scale change in 1998.

*Standarised unemployment rate; prior to 1993 data refers to Western Germany.

In Germany, fears of jobs loss have, as with the US and the UK, also tracked the unemployment rate for much of the last two decades, as shown in Figure 4. By the late 1990s approximately one in ten Germans thought that it was probable or certain that they would lose their job within two years. Thus, despite the very different macroeconomic and institutional circumstances of the British, American and German labour markets, there are no great differences between them in the proportions of workers who perceive their jobs to be very insecure. One exceptional episode of insecurity in Germany stands out, however. Unsurprisingly, following re-unification fears of unemployment soared in East Germany. Meanwhile, perceived insecurity in the rest of the newly unified country remained at normal levels. But, as the general unemployment rate crept steadily upwards after 1991, so the insecurity of job-holders in Western Germany rose. Perceptions of insecurity in East Germany had by 1998 converged much closer to that of the rest of the country.

Table 3 Indices of Job Insecurity and Difficulty of Re-Employment by Gender, Job Contract, Tenure, Sector, Industry and Occupation, 1986-2001.

	Job Insecurity Index			Difficulty of Re-Employment Index			
	1986	1997	2001	1986	1992	1997	2001
All	0.67	0.71	0.53	3.14	3.11	2.90	2.70
Men	0.74	0.79	0.62	3.18	3.15	3.00	2.74
Women	0.58	0.62	0.42	3.08	3.06	2.78	2.66
Women & Full-Time	0.57	0.57	0.46	3.11	-	2.79	2.65
Women & Part-Time	0.60	0.70	0.37	3.04	-	2.77	2.67
Job Contract							
Permanent	-	0.59	0.48	-	-	2.92	2.72
Temporary	-	2.27	1.63	-	-	2.80	2.42
Job Tenure							
<= 12 months	1.14	0.96	0.67	2.87	-	2.50	2.42
> 1 yr, <=20 yrs	0.57	0.65	0.49	3.17	-	2.94	2.72
> 20 yrs	0.64	0.77	0.56	3.36	-	3.39	3.11
Ownership Sector							
Public	0.64	0.71	0.38	3.23	3.12	3.04	2.73
Private	0.68	0.72	0.59	3.09	3.10	2.86	2.69
All UK	-	0.72	0.55	-	-	2.81	2.66
Part/all non-UK	-	0.69	0.83	-	-	3.00	2.77
Industry							
Manufacturing	0.84	0.65	0.84	3.22	3.22	3.09	2.92
Construction	0.95	1.34	0.49	2.96	3.16	2.84	2.48
Wholesale	0.53	0.53	0.38	3.07	3.17	2.77	2.71
Hotels	0.49	0.71	0.24	2.78	2.73	2.70	2.41

Transport	0.80	0.77	0.69	3.32	3.28	3.08	2.80
Finance	0.19	0.84	0.47	3.22	3.07	2.95	2.61
Real Estate & Business Services	0.62	0.78	0.54	2.95	3.00	2.61	2.53
Public Administration	0.58	0.56	0.48	3.33	3.19	3.24	2.92
Education	0.47	0.67	0.43	3.18	3.08	2.98	2.65
Health	0.52	0.62	0.30	3.05	2.88	2.60	2.58
Other Community	0.54	0.83	0.64	3.07	3.03	2.88	2.70

Occupation							
Managers & Administrators	0.51	0.64	0.57	3.12	3.08	2.93	2.74
Professionals	0.49	0.93	0.47	3.11	2.90	2.88	2.57
Associate Professionals	0.60	0.57	0.50	3.09	2.54	2.88	2.75
Administrative & Secretarial	0.57	0.72	0.42	3.19	3.20	2.96	2.74
Skilled Trades	0.90	0.87	0.55	3.14	3.15	3.01	2.66
Personal Service	0.58	0.43	0.48	3.10	2.99	2.57	2.57
Sales	0.56	0.46	0.46	2.94	3.21	2.84	2.61
Plant & Machine Operatives	1.00	0.77	0.86	3.37	3.34	3.08	2.88
Elementary	0.71	0.82	0.50	3.06	3.21	2.79	2.74

Base is all those in work, aged 20-60.

Data Source: Social Change and Economic Life Initiative, 1986; Employment in Britain, 1992; and Skills Surveys, 1997 and 2001.

Table 4 Determinants of Job Insecurity in Britain in 2001.

	(1)	(2)
	2001	2001
Local Unemployment Rate	0.010 (0.010)	0.010 (0.028)
Female times Local Unemployment Rate	0.022 (0.032)	0.049 (0.053)
Industry Employment Growth	-3.166 (1.709)*	-3.767 (0.996)***
Foreign Ownership	0.316 (0.082)***	0.297 (0.095)**8
Temporary Job Contract	1.084 (0.109)***	1.307 (0.239)***
Job Tenure	0.000 (0.001)	0.000 (0.002)
Job Tenure Squared times 10^{-5}	-0.004 (0.018)	-0.013 (0.045)
Part Time	0.291 (0.199)	0.258 (0.300)
Age	0.000 (0.030)	0.077 (0.048)
Age Squared	0.013 (0.035)	-0.077 (0.056)
Female	-0.203 (0.122)*	-0.315 (0.183)*
Female & part-time	-0.439 (0.170)***	-0.441 (0.148)***
Public Sector	-0.197 (0.102)	-0.163 (0.193)
Unemployed in previous five years	0.184 (0.076)**	0.268 (0.145)*
Received insufficient training	0.113 (0.056)*	0.224 (0.095)**
Competition with low-wage economies		0.279 (0.094)***

Observations	2651	815
Pseudo-R^2	0.051	0.080

The dependent variable is the Job Insecurity Index; see notes to Table 3. Estimation is by ordinal probit; robust standard errors, in parentheses, adjusted for interdependence within industry clusters; * significant at 10%; ** significant at 5%; *** significant at 1%.

Data Source: Skills Survey, 2001; Employer Perspectives Survey.

The Job Insecurity Index in each group is the average value of the Job Insecurity Scale, where the chance of job loss ranges from 0 ("no chance") to 5 ("very likely"). The Difficulty of Re-Employment Index in each group is the average value of the Difficulty of Re-Employment scale, where the ease of re-employment ranges from 1 ("very easy") to 4 ("very difficult").

Changes in the Distribution of Risk of Job Loss

The rises and falls in the perceived risk of job loss have been unevenly experienced among the populations of both Britain and the U.S. Blue-collar workers have traditionally experienced the highest levels of insecurity, but during the 1990s certain white-collar groups became insecure, some possibly for the first time. Professional workers in Britain, in particular, were the most secure group in 1986, the least secure in 1997 (see Table 3). In the U.S., white collar occupations as a whole reported greater insecurity in the 1990s than in the 1980s, while blue-collar workers recorded a decline, leading therefore to a convergence in the experience of insecurity (Schmidt, 1999). The similarity of this picture of change and convergence in Britain and the U.S. is striking, and this distributional change may account in part for the increased press interest in job insecurity noted above (Figure 1). When some professional workers became insecure this was news, unlike the fate of blue-collar workers. Perhaps also the reportage of anecdotal evidence is dominated by the experiences of the middle and upper classes. In Britain there remain close links between the City of London and the world of journalism which tends to highlight the world of finance. That industry endured a considerable shakeout in the early 1990s, a fact, which is reflected in residual high insecurity industry in 1997 in (Table 3). Note, however, that both the professional occupations and the finance industry

returned to much lower levels of insecurity by 2001, as did press interest in the topic. Meanwhile, manufacturing sector workers who, in the mid 1980s, were very insecure and had become significantly less so by 1997, returned to greater levels of insecurity again in 2001, against the average trend for the rest of the economy. The experience of manufacturing workers is related to the pattern of recent change according to ownership (Table 3). While public sector workers felt considerably more secure in 2001 than in 1997, private sector workers only enjoyed greater security if their workplaces were entirely U.K. owned. Those that were in part or fully foreign-owned became significantly less secure over these recent years.

Another feature of Table 3 is the convergence of insecurity according to job tenure. Long tenure workers (over 20 years), traditionally the most secure, have had their confidence in the future more severely dented than other groups. Although their security recovered a little from 1997 to 2001, there was by 2001 remarkably no difference in perceived insecurity according to job tenure; those less than a year into the job were by 2001 feeling much more secure.

Finally, insecurity is unsurprisingly much higher for temporary workers and for men, and the pattern of change is similar according to contract status and gender. However, it is notable that women working part time now report themselves to feel more secure than any other group. [10]

The patterns just described from Table 3 are bivariate tabular descriptions and, arguably, inter-dependent. However, a simple multivariate analysis demonstrates that the correlates of insecurity just noted each have an independent conditional correlation with insecurity. Table 4 reports ordinal probit estimates of the determinants of the Job Insecurity Scale in Britain in 2001. In this analysis, the factors already discussed are augmented by labour market indicators relevant to each respondent's environment, by an indicator of perceived competence in the job, and by an indicator of the product market environment.

Column (1) shows that perceived insecurity is associated with objective indicators of the labour market. Rather than the local unemployment rate as such, it is the recent

[10] Homeworking (not shown in the table) also had no significant correlation with insecurity. Taken together, these findings mean that it makes no sense to link the undifferentiated concept of "non-standard" work to insecurity.

employment growth of the respondent's industry, and the individual's own recent experience of unemployment[11] that dominate as significant determinants of insecurity. In addition, the estimates confirm the association of insecurity with having a temporary job contract, and with working for a foreign-owned firm in 2001.

Column (2) includes a variable taken from a follow-up survey of the employers of some of the skills survey respondents, the Employer Perspectives Survey (Green et al, 2003). The latter collected, among other things, details of the product market in which the establishment competes. I wanted to test the hypothesis that foreign competition, particularly from low-wage economies, was generating insecurity. This hypothesis is robustly confirmed: the security of employees is significantly lower where such competition is reported by senior managers of the establishment. Together with the role of foreign ownership, these findings are consistent with the view that global economic integration may now be having an effect on workers' security.

3.2 Perceptions of the Cost of Job Loss

The cost of job loss is partially and imperfectly captured in the British surveys by the following instrument: "If you were looking for work today, how easy or difficult do you think it would be for you to find as good a job as your current one?", with a 4-point scale, ranging from "very easy" to "very difficult" which I entitle the Difficulty of Re-Employment Scale. In the U.S. the General Social Survey uses a similar instrument: "About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you now have? Would you say very easy, somewhat easy, or not easy at all?". Neither instrument can be said to pick up all the elements of the cost of job loss, which include the loss of pay (net of benefits) while unemployed, the duration of unemployment and the potentially lower wage in a new post-displacement job. The latter two elements might be thought of as contributing to the difficulty of re-employment in an equivalent job, which the instruments try to capture. But the first element, the financial loss while unemployed, is not addressed in the question. In addition to this issue of validity, there are no direct ways to check the reliability of the instruments in measuring difficulty of re-employment. We can only fall

[11] The inclusion of this variable reduced considerably the number of observations due to missing values. Omitting this variable leaves the pattern of other coefficients unaltered.

back on an indirect check on the reliability of the responses, which is that they are correlated as expected with indicators of the labour market environment. For example, 70 percent of workers in unionised establishments register that equivalent re-employment would be quite or very difficult, compared to just 59 percent in non-union jobs. The perceived difficulty of re-employment is also greater for individuals with a history of unemployment and with insufficient recent training, and in industries with declining employment.

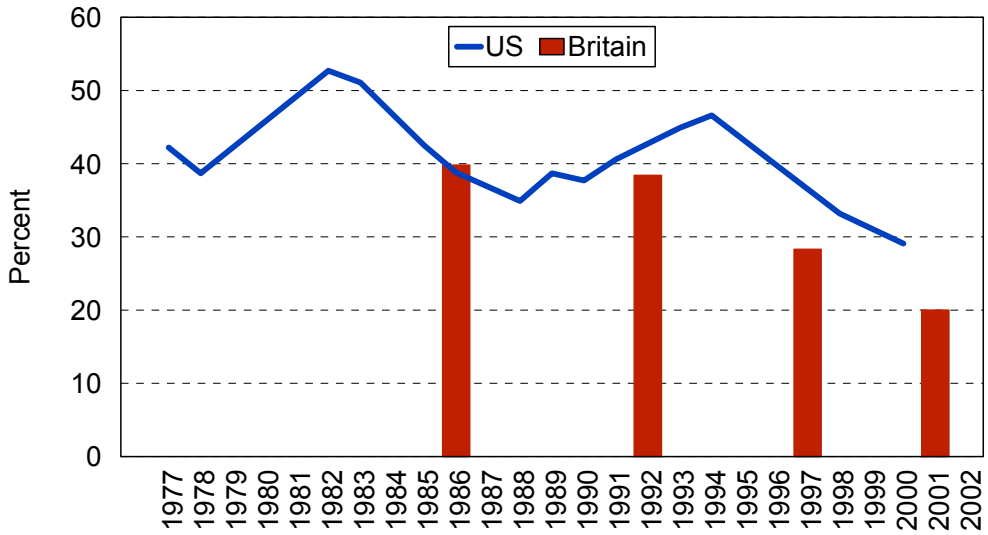
Changes in the Perceived Difficulty of Re-Employment

Figure 5, and Tables 3 and 5, show how the perceived difficulty of re-employment has been changing. Over the longer period of observation available in the U.S., the perceived difficulty of re-employment has broadly risen and fallen with the unemployment cycle. There is a small downward trend taking the 1977-2000 period as a whole. In Britain the difficulty of re-employment remained unchanged from 1986 to 1997 but, as in the U.S., decreased substantially in the late 1990s. As can also be seen from Tables 3 and 5, there are no groups in Britain for which this pattern of stability then decline was appreciably different.

Those trends present one unequivocal conclusion: there is no detectable trend for perceptions of the difficulty of re-employment in an equally good job, a major component of the perceived cost of job loss, to rise over time, either absolutely or relative to unemployment.

Figure 5 Perceived Difficulty of Re-Employment, Britain and US

Proportion of workers who would find it very difficult (Britain) or not easy (US) to get equally good job.



Source: Britain: see Table 5; US: GSS 1977-2000, Website: http://www.icpsr.umich.edu:8080/GSS/homepage.htm; base is full-time or part-time employed, aged 18 and over.

Table 5 Difficulty of Re-Employment Scale, by Sex, 1986, 1992, 1992 and 2001 in Britain

How Easy to Get Another Job As Good As Current One:	Men				Women			
	1986	1992	1997	2001	1986	1992	1997	2001
Very Easy	4.9	4.8	5.5	9.9	4.5	4.4	8.5	10.8
Quite Easy	14.9	16.5	21.8	28.5	18.4	20.4	27.2	29.8
Quite Difficult	37.2	37.7	39.7	39.5	41.8	39.8	41.8	42.1
Very Difficult	43.0	40.9	33.0	22.2	35.3	35.5	22.6	17.3

Base is all those in work, aged 20-60.

Data Source: Social Change and Economic Life Initiative, 1986; Employment in Britain, 1992; and Skills Surveys, 1997 and 2001.

3.3 Alternative Subjective Instruments for Insecurity

Table 6 Alternative Job Insecurity Scale, Britain and United States, 1989 and 1997.

Responses to statement: "My job is secure"	**Britain** %		**United States** %	
	1989	1997	1989	1997
Strongly disagree	4.9	6.4	2.4	2.9
Disagree	15.2	21.8	8.5	11.7
Neither agree nor disagree	21.7	19.4	13.4	15.5
Agree	41.0	40.2	47.1	45.9
Strongly agree	17.2	12.2	28.6	24.0

Base is all those in work.

Data Source: International Social Survey Programme.

In the International Social Survey Programme (ISSP), respondents in 1989 and 1997 were asked whether they agreed with the statement, "My job is secure", using a five-point scale. This type of question does not specifically link insecurity either to the risk of job loss, or to the cost of job loss. Arguably it may lead respondents to consider the wider implications of insecurity, such as the stability of their employment conditions (Burchell et al, 1999). One might expect that the risk of job loss would be the most important consideration in most respondents' minds. The validity of the instrument for measuring insecurity is thus not ideal, because it relies on the respondent's perception coinciding with that of the researcher. Unfortunately, there are also no separate opportunities for checking its reliability. The value of the instrument lies in its availability for a range of countries in representative surveys at two points in time.[12]

[12] International comparisons of the level of security are not possible with this data, because responses are affected by translation and by national norms; only changes over time can be meaningfully compared.

Table 6 presents the responses given by British and American workers.[13] A convenient shorthand is to define workers as insecure, from the point of view of this instrument, if they "disagreed" or "strongly disagreed" with the statement that their job was secure. Using this classification, it may be seen that 20.1% of British workers viewed their job as being insecure in 1989, while in 1997 this proportion had increased to 28.2%. In the US, the proportion of insecure workers also increased significantly, from 10.9% in 1989 to 14.6% in 1997. This rise is consistent with the rise in the perceived risk of job loss reported by General Social Survey respondents over this period. In both countries, this instrument confirms the view established earlier that insecurity was at a relatively high level in the mid 1990s.

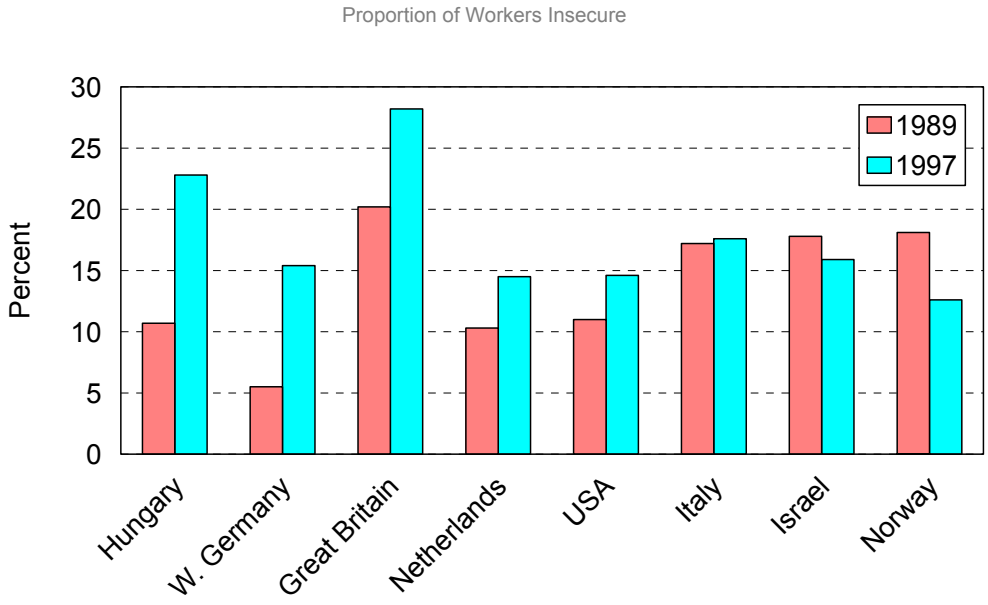
The ISSP data also indicate increasing insecurity between 1989 and 1997 in West Germany, The Netherlands and Hungary. In Italy and in Israel the changes were small and insignificant. In Norway workers were feeling more secure in 1997 than in 1989 (Figure 6). In most cases these changes are consistent with what one might expect. Workers in Hungary experienced a capitalist revolution during this interval, while those in West Germany went through the process of integration with East Germany and a rise in the aggregate unemployment rate from 5.6 percent to 9.9 percent. In Norway there was a small fall in the unemployment rate from 5 percent to 4.1 percent. The surprise is the Netherlands where the increased insecurity came despite the fall in the unemployment rate from 6.9 percent to 5.2 percent. Thus the Netherlands were similar in this respect to the US and Britain, in having unusually high perceived insecurity in the mid-1990s.

For Britain, an intriguing picture of insecurity trends in an earlier period is derivable from a similar instrument, whereby survey resondents were asked to rate their job on a four-point scale, ranging from 'very secure' to 'very insecure'. A trend can be extracted from the work histories recorded as part of the Social Change in Economic Life Inititative surveys in 1986. Allowing that there are potential problems of recall reliability in inferring trends from retrospective work histories, Burchell (2002) shows a picture of comparative stability in the 1960s and 1970s, with blue-collar workers traditionally bearing the brunt of economic insecurity. A very modest rise in this period makes way for a substantial hike in perceived in insecurity after

[13] Data is supplied by Zentralarchiv für Empirische Sozialforschung (Koeln). I thank Rolf

1979. These changes appear, also, to track the macroeconomic environment quite closely.

Figure 6 Perceptions of Insecurity, 1989 and 1997



Source: ISSP data.

4. Objective Proxies for Insecurity.

The story so far is that two of the major elements of job insecurity as perceived by workers – the risk and cost of job loss – have moved in accordance with the macroeconomic and labour market environment in recent decades, but exhibit no clear long-term secular trend. Perceptions of insecurity in Britain rose from the 1970s to the 1980s. In the latter part of the 1990s both elements declined in both the US and Britain, as their economies and aggregate unemployment declined. Prior to that the risk of job loss in the mid-1990s appears to have been unusually high for professional workers and long-tenured workers in Britain, and more generally for white-collar workers in the US.

Uher for his assistance in providing the 1997 data.

In this section, I overview evidence, based on various objective indicators, of ex-post job insecurity. Are the trends in the ex-ante perceptions of insecurity consistent with movements in the ex-post frequencies of job loss and wage loss?

Risk of Job Loss.

There is evidence on both sides of the Atlantic that the frequency with which employees enter into unemployment exhibits no secular upward trend over recent decades. In Britain, approximately 1.8 percent of male employees enter unemployment each month; the proportion naturally oscillates with the cycle and was falling from 1992 onwards, but there is virtually no secular trend since at least the late 1960s (Nickell et al, 2002).[14] From 1995 (when comparable figures become available) until 2002, there have been approximately 8 redundancies per thousand employees every spring quarter.[15] In the US, studies on job stability and job security (by which is meant involuntary job separations) have proliferated and, unfortunately, present an inconsistent picture, in part associated with differences in data sets and definitions. Most recent studies, however, imply relatively little if any change in the ex-post frequency of job separations between the 1980s and 1990s (Gottschalk and Moffitt, 1999). There are some studies which show an increase in job separation rates from the 1970s to the 1980s – for example, Bernhardt et al (1999), using data from the National Longitudinal Studies for young men. Some authors are able to distinguish voluntary from involuntary separations. Thus, Polsky (1999) finds a small increase in the rate of involuntary job separations between 1976-81 and 1986-91, especially for long-tenured workers. Valletta (1999) also finds that there was a significant increase between 1976 and 1991 in the frequency of job loss due to permanent lay-off or being fired, especially for long-tenured workers. This increase, even after controlling for the macroeconomic environment, can be interpreted as evidence of a decline in the honouring of long-term employment contracts and a rise of insecurity for men. In contrast, there was no overall change in job security for women according to this indicator.

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[14] Booth et al (1999) present a contrasting picture of rising rates of displacement through lay-offs from the 1950s through to the 1980s, drawn from the British Household Panel Study retrospective work histories. Though they control for aggregate unemployment, a possible problem with the interpretation of their findings is that this variable is negatively associated with lay-offs.

While the involuntary job separation rate is the most valid ex-post indicator of job insecurity, other indicators of job stability have been investigated on the grounds that security is associated with stability. That these two concepts are not the same thing implies that findings on job stability are less informative in this respect. One approach is to measure the proportions of workers who are in very short tenure jobs. Since those with short tenure are typically more insecure, any rise in this proportion is said to indicate an overall rise in insecurity. Jaeger and Stevens (1999) find relatively little change in this indicator of stability between the 1980s and 1990s in the US. A major drawback to this approach is that short-tenured workers may be more secure at some periods than at others (the findings on perceived risk of job loss confirm this).

Another approach focuses on broader indicators of the distribution of job tenures. One justification for such an approach is the oft-cited cliché that labour market changes were signaling the 'end of jobs for life'. Analysis has shown, however, that changes in job tenures through recent decades have been modest. While job tenure is declining for older workers and for less skilled men, a significant minority of men are still in jobs likely to last 20 years or more (Gregg and Wadsworth, 1995; Burgess and Rees, 1996, 1997). The average job tenure of men declined somewhat from the mid 1970s to the mid 1990s, but this was offset by a rise in the job tenure of women, especially those with dependent children (Gregg and Wadsworth, 1999). That rise could be interpreted as an effect of the introduction of regulations in Britain on maternity rights. However, a parallel pattern of change is also found in the U.S. While the overall length of tenure of jobs remained broadly stable from 1973 onwards, there was a switch away from long tenure among men's jobs, and towards longer-lasting jobs for women (Farber, 1995). This story of stability in job tenure is replicated for all industrialised countries throughout the 1990s (Auer and Cazes, 2000; 2003).

Job insecurity is also associated with type of job contract, leading researchers to identify insecurity by measures of the contract composition of the workforce. We have already seen that delineating non-standard workers *en bloc* as insecure is badly misleading. More pertinent is the view that temporary contract jobs are inherently insecure. As we saw from the subjective measures (Table 3), this presumption is

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[15] Source: Sly (2000), and *Labour Market Trends*, November 2002, Table C.42.

strongly confirmed: temporary contract workers do feel insecure. There is robust evidence to confirm, moreover, that temporary workers on average experience substantially lower wage, poorer working conditions, and lower levels of job satisfaction (OECD, 2002) .

It is questionable, however, whether the proportion of a nation's workforce on temporary contracts is a good indicator of job insecurity in the whole nation. That proportion reflect a combination of legislation and regulation (in respect of both temporary and permanent contracts), employer strategies and cyclical conditions. Conceivably, more protection for 'permanent' workers could stimulate a rise in the use of temporary workers; and countries with strong employment protection legislation (e.g. Spain) can have a high proportion of temporary workers, while others (e.g. the U.K.) have weak protection for all workers and comparatively few temporary workers. The impact of being temporary on insecurity is likely to vary across firms and space. Thus, only large secular changes in the proportion of temporary workers, plus the condition that this is not associated with more security for temporary or permanent workers, could be taken to validly indicate an increase in overall insecurity.

The evidence indicates substantive rises between the 1980s and 1990s in the proportionate use of temporary workers in Australia, Finland, France, Italy, Netherlands and Spain, a fall in Greece, and only modest changes elsewhere in the industrialised world where measures are available on a consistent basis (Mangan, 2000; Booth et al, 2002; Auer and Cazes, 2000). By far the most spectacular case is that of Spain, where through the 1990s a third of workers were on temporary contracts, a historical reflection of the failure to reform restrictive employment protections in the post-Franco era, and the early introduction of permissive legislation for temporary contracts (Dolado et al, 2002). The change since the early 1980s constituted a genuine rise in the average level of insecurity, as well as a significant re-distribution of insecurity and a segmentation of the labour market. Also remarkable is the case of Australia, which saw through the 1990s a substantive increase in the use of casual employment, up to as much as 28 percent of the workforce by 1998. As with Spain, this increase in insecurity for substantial sections of the workforce was driven in Australia by deregulation of a strongly controlled labour market and made feasible through the pressure of mass unemployment (de Ruyter and Burgess, 2000; Burgess

and Strachan, 2000). For most countries, however, temporary work contracts are still used sparingly.

Cost of Job Loss

Although it is well-established that workers suffer wage losses after unemployment (e.g. Jacobsen et al, 1993) there are few studies of the changing consequences of job loss using objective indicators. In the case of Britain, Nickell et al (2002) find an increase in the cost of job loss, using two indicators. From 1982-6 until 1992-7 the permanent wage loss after a spell of unemployment rose from approximately 7.8 percent to 15.5 percent. From 1982 to 1996 there was a rise in the probability of having a substantive wage cut while remaining in the job, though most of this was associated with a decline in the median rate of pay rises. Studies in the US, by contrast, have failed to uncover any substantive trend in the consequences of job changing between the 1980s and 1990s (Farber, 1993; Gottschalk and Moffitt, 1999).

The cost of job loss also is affected by the expected duration of unemployment, and the benefits that a worker expects to receive over this period. An increase in unemployment duration occurred in many countries with the return of mass unemployment in the 1980s. Whatever the conditions and character of any subsequent job, the risk of a longer spell of unemployment, should one lose a job, raises job insecurity. It is unsurprising that the perceptions of the difficulty of regaining employment tend to track the economic cycle. In addition, the cost of being unemployed changes if the replacement ratio (the ratio of out-of-work benefits to wages) changes. The replacement ratio fell in a number of countries during the 1980s and 1990s. Comparability is difficult to obtain, however, as the level of benefits usually depends on the period unemployed. [16]

[16] Nickell et al (2002) reveal a further element of rising insecurity in Britain, namely a secular rise between 1982-6 and 1992-7 in the risk of experiencing a large wage loss; this rise was mainly associated with a downward shift in the distribution of pay rises.

5. Conclusion: Insecurity and the Quality of Work

Underlying the story of change that I have attempted to unveil is the deep and long-lasting negative impact of unemployment on the well-being of workers. For those actually becoming unemployed, the impact is normally stark. My focus here is not so much on the actual experience of unemployment as on the threat of unemployment for those in work. The distance of the state of being in work from the state of being unemployed is part of the quality of the job. Psychological studies verify that a worker's well-being is significantly impaired by the uncertainties and negative financial implications of job insecurity.

Thus, if there is a cyclical movement or a secular trend in aggregate unemployment, this affects the quality of work life for those still employed but facing changing insecurity. When the capitalist world entered a long period of instability following the end of the post-war "golden age" of capitalism, and more especially the era of persistent mass unemployment which arrived for many countries in the 1980s, the rising insecurity of all workers constituted a decline in the quality of work.

Studies of the rise and decline of unemployment are, however, plentiful. What has motivated this paper is the proposition that, especially in the last two decades, the structure of the labour market has become more flexible and has thereby engendered an increase in insecurity that somehow transcends the movements in actual unemployment. This view has been put most forcefully in respect of the US labour market, but has also been applied with considerable vigour to labour market in many other industrialised nations. Psychologists have shown that insecurity has substantive detrimental effects on the quality of work life, so if there has been such a rise in insecurity this could, just in itself, mean a substantial deterioration in the quality of work life in industrialised economies.

But earlier expositions and evaluations of this picture were erected on a somewhat fragile evidence base. I have therefore aimed to use available new survey material to consider the validity of this picture of change.

i. I have conceptualised job insecurity as depending on both the expectation and the variance of the value potentially lost through any downward deviations from the norm for the job. The two most important elements of insecurity are the risk and the cost of job loss. Ex ante measures of insecurity are the most

valid instruments, though objective measures of the frequency of job loss and other events have the advantage of potentially greater reliability. Objective measures are also available in a wider range of countries. The findings using both ex ante and ex post measurement approaches are summarised in Table 7.

ii. For those countries about which we know the most – the US, Britain and Germany – the idea that the risk of job loss has risen relative to unemployment is hard to substantiate. Both objective and subjective measures agree that the chances of losing one's job have moved largely with the unemployment cycle. In the US and in the UK there is some evidence that, in the middle of the 1990s decade, insecurity was temporarily on the high side, but the return to low unemployment rates by the end of the 1990s was matched by low levels of insecurity. Though the evidence is not yet in, by extrapolation it is likely that, with rising recorded unemployment rates in the US, perceptions of the risk of job loss will have risen since 2000. In Germany's case, the temporary rise in unemployment fears in the early 1990s is attributable to the transition of East German labour market's transition to capitalist processes. There are no great differences between Germany, the US and Britain in the proportions of workers reporting high levels of job insecurity.

iii. For other countries, the same objective and subjective measures of the risk of job loss are not available. Yet substantial rises in the deployment of temporary work contracts do signal an increase in and redistribution of insecurity in Spain and Australia, and more modestly in Finland, France, Sweden and Italy.

iv. Objective data suggests that one element of the cost of job loss – the diminished wage in post-displacement jobs -- may have risen for British males. No such changes can be detected in the US. Moreover, the subjective perceptions of the difficulty of regaining equivalent employment have not had a secular increase in either country, experiencing in particular a sharp decline in the late 1990s.

v. There has some been some redistribution of insecurity, at least for certain periods in some countries. Of interest is the finding that it is by no means always the lower skilled workers who have experienced the worst rises in insecurity. In Britain, relatively skilled workers in the finance industry and

professional workers generally became unusually insecure during the middle of the 1990s. The finance industry insecurity reflected a technology-induced shakeout in that industry which would have been seen in other countries. In the US white collar workers as a group had the larger increase in insecurity. Male, long-tenured, workers also have suffered modest declines in insecurity. These redistributive effects may provide to the sceptical reader an explanation for the rising concern of the media in the idea of job insecurity in the middle of the 1990s, despite the fact that comparatively high levels of insecurity have been the experience of low-status occupations for a long time.

vi. There is suggestive recent evidence in Britain that global economic integration may be starting to have an effect on at least the distribution of insecurity: the reported findings on the determinants of insecurity showed that insecurity was distinctly higher for workers in companies with foreign ownership or facing competition from low-wage economies.

My overall conclusion is that it is not accurate to describe work in modern labour markets as especially insecure, beyond the fact that this has been an era of high unemployment which in some but not all countries has persisted throughout the recent decade till the present. Therefore, despite impressive findings linking insecurity to loss of well-being in workers, it would not be accurate to ascribe any fall in the quality of work to a secular upward shift in insecurity. There is, however, one important qualification to this verdict. It is quite apparent that declining unemployment benefits in many countries, as manifested in declining replacement ratios, will have raised the cost of job loss, which is significant for those at risk of job loss. We also know that, in Britain, this effect has been compounded by a secular increase for men in the loss of wages associated with a spell of unemployment.

There have indeed been many changes affecting the quality of working life in the current era, including periods of substantive intensification of work, rising stress, reduced opportunities for discretion and reduced collective protection from undue exploitation. Working life also continues to be insecure for many, but to take job insecurity as the prime source of low job quality in the current period, we would be attaching an unwarranted ‘modern’ label to a problem which is endemic in capitalist economies. Where unemployment rates have returned to as low levels as in earlier decades, the risk of job loss is not noticeably worse now than it was then.

Table 7 Summary of Evidence on Trends in Job Insecurity.

	Validity	Study	Finding
Risk of Job Loss			
Direct survey instruments for ex-ante insecurity	✓✓✓	Schmidt (1999); Green et al (2001); this paper.	Rises and falls with cycle; rose above trend in mid-1990s in both US and UK.
Unspecific survey instrument for ex-ante insecurity job insecurity	✓	This paper.	1989-1997 rises in Hungary, Germany, Britain, Netherlands, US; fall in Norway.
Average frequency of exit to unemployment	✓✓	Nickell et al (2002); Gottschalk and Moffitt (1999).	No secular change in UK since 1968. No increase in US displacement rates, 1980s to 1990s.
Job separation rate Involuntary Overall	 ✓✓ ✓	 Polsky (1999). Valletta (1999). Bernhardt et al (1999).	 Rise, US, 1976-81 to 1986-91. Rise, US, 1976-1991, rate of permanent lay-offs and dismissals. Increased instability for young US men, 60s/70s to 80s/90s.
Job tenure: % with short tenure Average tenure -------- Retention rates Range of stability indicators	 ? ? ? ? ?	 Jaeger and Stevens (1999). Burgess and Rees (1996); Gregg and Wadsworth (1999) Farber (1995). Neumark et al (1999). Auer and Cazes (2000).	 No change in US in 1980s and 1990s. Britain, 1975 to 1998: small fall for men, small rise for women. US job tenure stable since 1973. No secular decline in job stability. Stability in job tenures in the most industrialised countries.
Proportion of workers on temporary or casual employment contracts	?	Mangan (2000); Booth et al (2002); Auer and Cazes (2000).	Rises in Australia, Spain, Finland, France, Sweden, Netherlands, Italy; no big change in UK Germany, Denmark, Belgium; fall in Greece.

Cost of Job Loss			
Workers' perception of difficulty of regaining "as good employment"	✓	Schmidt (1999); Green et al (2001); this paper.	Fallen with unemployment in both US and UK.
Wage loss after unemployment	✓✓	Nickell et al (2002).	Secular rise for British men from 1982-6 to 1992-7.
Wage loss after job change	✓✓	Farber (1993). Gottschalk and Moffitt (1999).	No change in US, 1982-3 to 1990-91. No change in US, 1980s and 1990s.
Probability of non-employment after job exit	✓✓	Gottschalk and Moffitt (1999).	No change in US in 1980s and 1990s.

✓ Summarises my judgement (see text) of how far the measure conforms to an element of the concept of job insecurity. This is not a judgement about reliability.

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Data Appendix

Sources for original analyses reported in this paper are briefly described as follows:

British Household Panel Study (BHPS)

The BHPS is a nationally representative panel data set of individuals and households residing in Britain. All adults in sampled households are interviewed once a year. The original sample, selected following a stratified random sampling procedure, was first interviewed in 1990. It comprises some 5,500 households and 10,300 individuals. New households formed by members splitting from their "old" household are added to the sample. Members leave through death and through sample attrition. The panel is also periodically refreshed with new samples. Full details are at: www.iser.essex.ac.uk/bhps

Funding Source: The UK Economic and Social Research Council.

The Social Change and Economic Life Initiative

The Social Change and Economic Life Initiative (SCELI) comprised several surveys concerned with work. For this book, only the subsample of 4,047 comprising those aged 20 to 60 and in employment was used. The sample was drawn randomly from six large areas or Britain, which were selected to give a range of social and industrial conditions with varying degrees of prosperity. Although the survey was not explicitly designed to generate a random representative cross-section of Britain in 1986, subsequent checks using the Labour Force Survey have confirmed that the achieved sample was representative of Britain as a whole in terms of gender, age, employment status, social class and ethnicity (Green, Felstead and Gallie, 2000). The main method of data collection was through face-to-face interview. For more details, see Penn et al (1994). Weights were applied to correct for the differential probability of selection depending on the number of eligible persons at each address. Since the achieved sample slightly over-represented women, compared with Labour Force Survey data, a second small correction was also applied, reducing the weight for women and raising the weight for men so as to match national data.

Funding Source: The UK Economic and Social Research Council, …?

Employment in Britain

The Employment in Britain research programme comprised two surveys, one of employed the other of unemployed people, living in Britain in 1992 and aged 20 to 60. Only the former is used in this book. It comprised an achieved sample of 3,869 individuals. Stratified random sampling was used to select households from sectors drawn from the Postal Address File. One person was interviewed per household, chosen randomly from those that were found and eligible at each address. Interviews were face to face, and involved three parts: the respondent's work history, the main interview concerning current and recent experiences of work, and a short self-completion interview, completed in the presence of but without intervention by the interviewer. Weights were applied to correct for the differential probability of selection depending on the number of eligible persons at each address. Since the achieved sample slightly over-represented women, compared with Labour Force Survey data, a second small correction was also applied, reducing the weight for women and raising the weight for men so as to match national data. See Gallie et al (1998) for full details.

Funding Source: An industrial consortium, the UK Employment Department, the UK Employment Service, and the Leverhulme Trust.

The 1997 Skills Survey

The Skills Survey undertaken in 1997 surveyed individuals in employment aged 20 to 60 in Britain. The focus of the survey was the skills that individuals use in their jobs. Some questions were designed to replicate identically those in SCELI and in Employment in Britain. The achieved sample was 2467 cases. Stratified random sampling was used to select households from sectors drawn from the UK Postal Address File. One person was interviewed per household, chosen randomly from those that were found and eligible at each address. Interviews were face to face, and averaged 40 minutes. Weights were applied to correct for the differential probability of selection depending on the number of eligible persons at each address. Since the achieved sample slightly over-represented women, compared with Labour Force Survey data, another small correction was also applied, reducing the weight for

women and raising the weight for men so as to match national data. See Ashton et al (1999) for full details.

Funding Source: The UK Economic and Social Research Council.

The 2001 Skills Survey

The 2001 Skills Survey surveyed individuals in employment aged 20 to 60 in Britain. The focus of the survey was the skills that individuals use in their jobs. Many of the questions were designed to replicate identically those in SCELI, Employment in Britain and in the 1997 Skills Survey. The achieved sample was 4470 cases. Interviews were face to face, and averaged 53 minutes. Stratified random sampling was used to select households from sectors drawn from the UK Postal Address File. One person was interviewed per household, chosen randomly from those that were found and eligible at each address. Weights were applied to correct for the differential probability of selection depending on the number of eligible persons at each address. Since the achieved sample slightly over-represented women, compared with Labour Force Survey data, another small correction was also applied, reducing the weight for women and raising the weight for men so as to match national data. See Felstead et al (2002) for full details.

Funding Source: TheUK Government's Department for Education and Skills.

The German Socio-Economic Panel (GSOEP).

The GSOEP is a nationally representative panel data set of individuals and households residing in Old and New Federal German States. Respondents are interviewed once a year. The original sample, selected following a stratified random sampling procedure, was first interviewed in 1984. New members are each year added through children attaining age 16, new households formed by members splitting from their "old" household. Members leave through death and through sample attrition. The panel is also periodically refreshed with new samples, including a new East German sample after re-unification. Successive waves are thus designed to be representative of the relevant population in Germany. In 2001 there were approximately 12,000 households

and 22,000 persons in the panel. Questionnaires include labour market histories since leaving education. Labour market information is collected every year, and job characteristics data every few years. Full details are at: www.diw.de/english/sop/

Funding Source: The German Science Foundation.

The General Social Survey (GSS)

The GSS is a nationally representative survey of the US population, conducted annually almost every year since 1972. Being the product of an admirable, early, act of far-thinking investment by an inter-disciplinary team of social scientists, the GSS meticulously replicates both questions and question sequences in successive surveys, in order to allow researchers to track change and thereby inform public policy. It covers each year a broad set of core issues, and other "bolt-on" modules devoted to particular topics. A work orientations module was included in 1989 and in 1997, while some basic employment data is included every year. Stratified random sampling methods are used nowadays, though sampling strategies in some early years used partial quota methods, which differed from random methods in complex ways. Since 1985, this survey has been part of the International Social Survey Project. The GSS sequence epitomises the enhanced material suitable for understanding social change, available to analysts and future historians of recent decades, compared to what is possible for historians of earlier eras.

Full details can be obtained from: www.icpsr.umich.edu:8080/GSS/homepage.htm

Funding Source: the main but not exclusive source has been the National Science Foundation.

International Social Survey Programme (ISSP)

This programme is not one particular survey, but a network that brings together national surveys in many different countries using comparable methodologies and a set of core questions. For example, in the United States the data come from the General Social Survey (see above). The objective is to support international comparative research in the social sciences. Each year the core questions are supplemented by one or more additional modules. In both 1989 and 1997 the added

module was on the theme of "work orientation". Identical questions permit comparisons for 8 countries that were surveyed in both years.

Details are at: www.issp.org

Funding Sources: various national sources.