Job security in the 1990s: How much is job security worth to employees?

Flexibility—the ability to contract or expand a firm's workforce in response to market demand for the firm's products—has been hailed as a key to corporate success since the late 1980s. But has this ushered in a new era of job insecurity for workers? And at what cost? This article presents evidence on employees' feelings of job insecurity in the 1990s and on the value that they place on security of employment.

Neoclassical economics implies that if workers value job security, there will be a trade-off between pay and security. In this view, if workers are offered more secure contracts, they would be willing to accept a lower wage. This theory of compensating differentials can be traced back to the writings of Adam Smith in *The Wealth of Nations*. Research in social psychology suggests that the value of job security (or the compensation required for job insecurity) is probably quite large. Aside from its effects on workers' satisfaction (utility), job security may elicit levels of commitment that are difficult to match by other means. Thus, from an employer's point of view, greater flexibility offers advantages but these need to be weighed against its disadvantages. In particular, employers might have to pay a substantial bonus to workers to compensate for insecurity or, alternatively, settle for lower quality workers.

This analysis addresses several issues:

- It assesses Australians' perceptions of the security of their jobs and how much security has declined since the late 1980s.
- It puts these perceptions into international context with comparisons to a high-security 'Scandinavian model' country (Finland), a country whose dramatic, on-going marketisation makes Australia's restructuring look tame (Poland), and a still largely-unreformed socialist economy in free-fall (Bulgaria).
- It shows which Australian workers have secure jobs and which do not.
- It measures the impact of job security on workers' satisfaction with their income, controlling for

Topics in future issues

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- ***Employment***: Job satisfaction. Mismatch between employees' skills and job requirements. Who gets good jobs? Jobs in Australia compared to other nations. Effect of unemployment on well-being. Discrimination against migrants? Attitudes to affirmative action.
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- ***Family and society***: Changing attitudes. Family background and education. Do independent schools do better by their students? Why married women work. Religion: what Australians believe. Attitudes to sexual permissiveness, abortion, euthanasia. Neighbouring. Volunteer work.

other factors. It shows that variations in security have almost as much effect as variations in pay.

- It assesses trade-offs between security and pay. We find, for example, that from workers' point of view a secure job paying $10 an hour is equivalent to an insecure job paying $14 an hour. This has important implications for compensation packages.

In analysing changes over time, we use pooled data from the 1989 to 1996/97 International Social Science Survey/Australia surveys. For the international comparisons, we use data from large, representative national samples from the *International Survey of Economic Attitudes* conducted in Bulgaria, Finland, and Poland.[1]

How secure are Australians' jobs?[2]

We asked:

1. Is your job secure?

17% Yes, definitely [100 points]
48% Yes, probably [75 points]
18% Sometimes yes, sometimes no [50 points]
13% No, probably not [25 points]
4% No, definitely not [0 points]
—
100% (8418 cases)
[Mean = 66 points]

17% chose 'Definitely yes' and another 48% chose 'Probably yes'—for a total of 65% feeling at least relatively secure. Another 18% put their jobs at the neutral point as neither secure nor insecure. 13% chose 'Probably not' secure and another 4% chose 'Definitely not'.

Answers to a single question can be misleading, so it is safer to confirm findings with other parallel questions. We also asked:

2. Is your future in this company secure?

15% Yes, definitely [100 points]
45% Yes, probably [75 points]
22% In between; Sometimes yes, sometimes no [50 points]
14% No, probably not [25 points]
5% No, definitely not [0 points]
—
100% (3390 cases)
[Mean = 63 points]

Answers to this question confirm the image of middling levels of security. We also asked:

3. Do you have a* permanent *job, with some legal protection against being fired or made redundant?

18% Legally permanent; difficult or impossible to lose my job [100 points]
46% Practically secure; hard to lose my job [100 points]
36% Not secure; could be fired or made redundant at any time [0 points]
—
100% (3634 cases)
[Mean = 41 points]

A substantial majority of Australian workers, 64% say that their jobs are legally or practically permanent. The government is the main employer offering legal permanence, but not all government employees are legally permanent.

Finally, even if employers are well pleased with workers, in flexible market economies, firms may fail and cost workers' their jobs through no fault of their own:

4. Will your company still be in business 5 years from now?

42% Definitely yes [100 points]
42% Probably yes [75 points]
12% In between; sometimes yes, sometimes no [50 points]
3% Probably not [25 points]
1% Definitely no [0 points]
—
100% (3402 cases)
[Mean = 80 points]

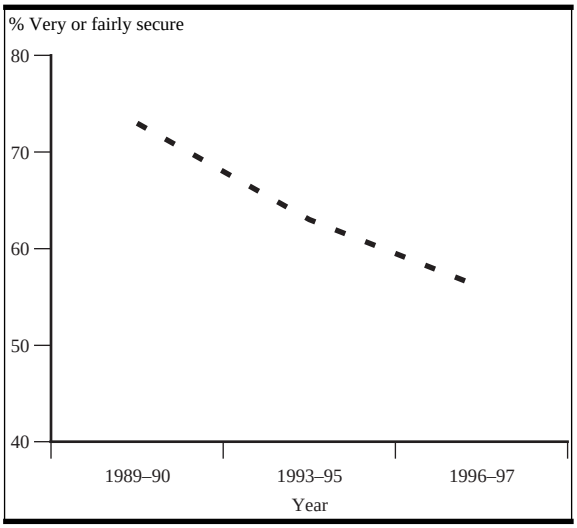
The great majority of Australian workers are confident in the future of their firms: few feel like rats on sinking ships. Workers in big firms feel more secure about the future of their companies.[3]

Answers to these questions—which are highly correlated—all suggest that most Australians feel their jobs are secure, some are uncertain, and a minority feel insecure.[4]

Changes over time

Job security in Australia is rapidly declining. In 1989/90 when we first asked the 'is your job secure' question, the vast majority of Australian workers reported having secure jobs: a total of 73% felt very secure or fairly secure in their jobs (Figure 1). In the next few years, this dropped to 63% and by 1996/97 it had fallen yet further to 56%.

Figure 1
Declining job security in Australia



This decline in security is important. Using methods described later in the paper, we estimate the decline is equivalent to about a 13% drop in income. That is, it would take a pay rise of 13% in the (not very secure) jobs Australians have now to make them as rewarding as the (more secure) jobs Australians held in the late 1980s.

Thus, a firm's ability to contract its workforce in response to declines in demand for the firm's products comes at a substantial cost to the workers. At the same rate of pay, workers will find their jobs less satisfying. To provide the same level of satisfaction—and the same quality of worker in the long run—firms would have to increase the pay of insecure jobs by 10% to 15%.

How does Australia compare to other nations?

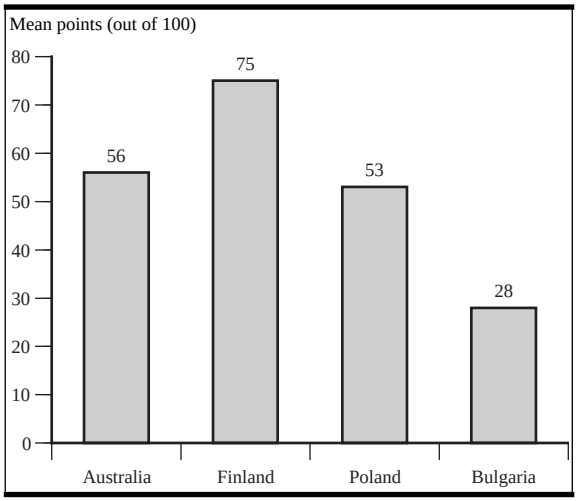
We put these job security questions to representative national samples in Finland, a stable 'Scandinavian model' quasi-socialist country; in Poland, a formerly socialist country now rapidly shifting to a market economy; and in Bulgaria, a declining, still largely unreformed socialist economy deeply mistrustful of markets (Figure 2).

The Scandinavian model clearly offers the most secure jobs: 75% of Finnish workers say that their jobs are definitely secure or probably secure. Interestingly, that is about the same level of security as Australian workers felt in the late 1980s, before the recent economic changes. But now Australians' security has fallen sharply to 56%.

Although the transition beyond socialism began only recently in Poland, it seems to have reduced people's feelings of job security from the high levels that prevailed under communism: only 53% of Polish workers now feel at least fairly secure in their jobs. This is about the same level as for contemporary Australia.

Bulgaria's declining (and still mostly socialist) economy seems to provide even less security. Only 28% feel fairly secure in their jobs. It seems likely that decline makes people feel insecure despite government policies endorsing permanent employment.

Figure 2
Job security in comparative perspective



Who has secure jobs?

What kinds of Australian workers have secure jobs? There are some striking differences, revealed by regression analysis (Figure 3).[5]

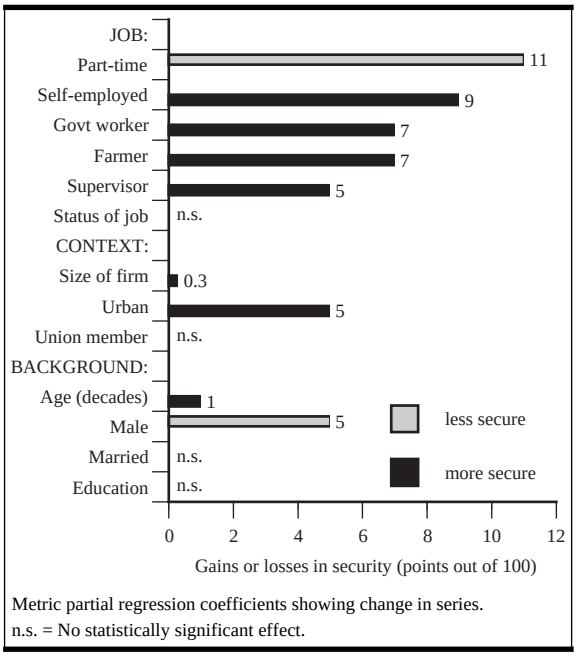
Part-time workers have much less secure jobs than full-time workers, 11 points (out of 100) less secure. This is the single most important difference of all those we examine. Note that this is an independent effect of part-time status, quite apart from other partly overlapping characteristics of part-time workers such as their sex, education, urban residence, and trade union membership—all of which are controlled in the analysis.

Farmers and other self-employed people feel much more secure than their peers who are employees, by about 7 to 9 points. Supervisors are more secure than those they supervise, by 5 points.

Government employees are more secure than their private sector peers, 7 points out of 100—despite the past decade's attempts to emphasise merit and performance in government employment.

Surprisingly, those in higher status jobs (like professionals and managers) are in general no more

Figure 3
Who has secure jobs in Australia?



Metric partial regression coefficients showing change in series.
n.s. = No statistically significant effect.

secure than those in middle or lower status jobs. The only exception is that semi-skilled workers, unskilled workers, and farm labourers are a little less secure than others workers, by 6 points.[6]

Interestingly, education has no impact on job security, net of other factors: among workers in the same job, the more educated workers have no advantage in security. Education is a key factor in getting a good job, but, these days, good jobs are not necessarily secure.

An interesting 'dog that did not bark' is union membership. Surprisingly, union members are no more secure than non-members in comparable jobs. Nor are urban jobs any more secure than similar jobs in rural areas.

Employees of large firms are just slightly more secure than employees of small ones, by a fraction of a point.

Surprisingly, men feel 5 points *less* secure than women in similar jobs. This is net of other factors, notably that more men than women work full-time.

Older workers are only a little more secure than younger workers: if two workers have the same job and the same qualifications but differ by 10 years in age, the older will be just 1 point more secure than the younger. This is interesting, because many people feared that industrial restructuring would freeze young people out of secure jobs, creating a strange two-class society with aging cohorts clinging to their secure, predictable careers, and those who come after them never knowing where next month's pay-cheque will come from. Instead, there are fewer secure jobs available now than there used to be, but young people seem to have almost equal access to them.

Effect on satisfaction with pay

Does job security matter? The simplest neo-classical model holds that workers seek only to maximise the size of their income. In this view, workers are always keeping an eye out for other jobs that offer better pay in the long-term, so they aren't very concerned with job security.

But workers may be risk-averse. Like investors who prefer secure 'blue-chip' bonds to better paying but more risky investments in stocks, some workers may value the security of their income. Such risk averse workers would prefer a single job that pays a modest but secure wage to a varied series of different jobs, even if that series pays better on average.

Or workers may take a wider perspective on what they want from their jobs. In the extreme, a traditional communitarian model suggests that workers are happier and contribute more when they feel secure and integrated into the companies in which they work.

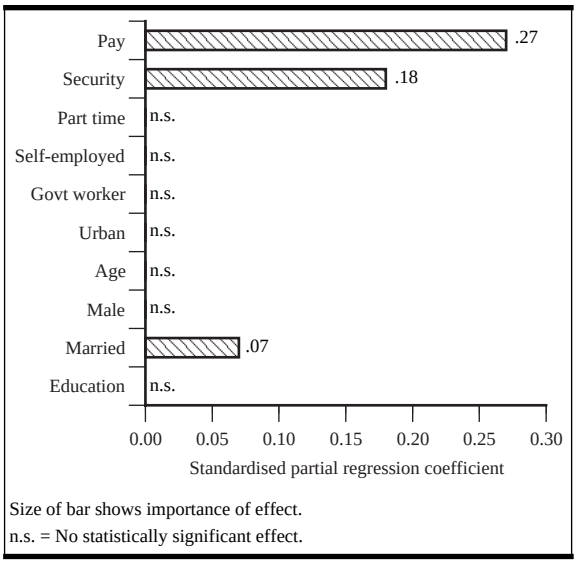
To assess these possibilities, we estimate the impact of job security on worker's satisfaction with their income. We measure satisfaction by three questions from a standard battery on life and job satisfaction:[7]

> ***[How do you feel about…] Your standard of living—the things you have, like housing, washer, clothes, stereo, car and so on?***
> *Delighted/ very pleased/ pleased/ mostly satisfied/ mixed feelings/ mostly dissatisfied/ unhappy/ terrible*
>
> ***Your income and financial situation?***
> *[answers as above]*
>
> ***[Now about your job, are you…] Satisfied with your pay?***
> *[answers as above]*

Of course, one's pay has a huge influence: well-paid workers are much more satisfied with their pay and standard of living (Figure 4). The size of this impact is estimated by a multiple regression analysis using a variety of factors to predict who is satisfied, and who is not.[8]

But strikingly, satisfaction with pay and standard of living is also strongly influenced by job security. Security's impact is fully two-thirds as large as pay's, as shown by security's standardised effect of .18 compared to pay's .27 in the multiple regression analysis.[9] Note that this is a separate effect, with the 'noise' of

Figure 4
What makes for satisfaction with earnings?



other partially overlapping effects (such as pay and other job characteristics) that might distort it filtered out by the regression analysis. Thus, job security is a very important factor in determining workers' satisfaction with their financial situation: having a secure income is fully two-thirds as important as having a large one.

Of the many other aspects of work and background in the model, nothing else has any substantial impact on satisfaction with pay. The only (minor) exception is that getting married seems to yield a small gain in satisfaction, perhaps reflecting spouse's earnings or possibly economies of scale in establishing and running a household.

Implications for pay packages

These results have important implications for pay packages. Let us begin with an example:[10]

- Take a worker in a secure job—as secure as that of a typical full-time government employee, 73 points on the job security scale—but with low earnings of $10 an hour. On average, workers like this are moderately satisfied with their income and standard of living, 59 points.

- How will a such a worker react if their job security declines? Suppose security were to decline to the low level typical of unskilled workers in the private sector, who average only 53 on the job security scale.[11] This drop in security would reduce the worker's satisfaction with his pay and standard of living to 56 points, down 3 points from his previous 59 points when the job was secure.

- The countervailing increase in pay required to restore the worker to his former level of satisfaction is substantial: his pay would need to be raised from $10.00 per hour to $14.44 per hour, an increase of 44% (Table 1).

Similar calculations show that for a worker who began by earning $20 an hour with high job security, the same drop in security would require a pay rise to $24.93 per hour to compensate fully. That is an increase of 25%.

For a very prosperous worker earning $40 an hour, the same drop in security would require a pay rise to $46.48 to compensate, 16% more.

Job security has a high value to workers, especially low paid workers: for them, security is equivalent to a very substantial part of their pay. Other examples of combinations of pay and security that are equally attractive to workers are given in the rows of Table 1. The relative impact of security on income satisfaction decreases as salaries increase. This may imply that over the long run, with sustained economic growth and increases in real earnings, job security may become a less pressing issue. These results further suggest that job security was a more valuable commodity to all workers a long time ago when real wages were lower for the same jobs.

The results in Table 1 also imply that the 1990s' decline in job security has significantly reduced workers satisfaction with their pay and standard of living. Indeed, Australia's actual decline in job security between 1989 and 1997 has reduced worker's satisfaction with their pay by as much as a 13% drop in income would have without any change in security, on average.[12] That is a substantial loss to the workers.

Table 1
Trade-offs between pay and security: Each row gives alternative compensation packages mixing pay and security to produce the same level of satisfaction

High security[a]	*Average security*[b]	*Low security*[c]
$10.00	$12.07	$14.44
$20.00	$22.28	$24.93
$30.00	$32.66	$35.66
$40.00	$43.02	$46.48
$50.00	$53.58	$57.70
$60.00	$64.08	$69.17

Notes: (a) Average for full-time public employees, 70 points.
(b) Average for the workforce as a whole, 62 points.
(c) Average for part-time private sector employees, 53 points.

The same logic applies in the other direction: if employers are able to **increase** job security, they should be able to pay workers significantly lower wages while leaving them subjectively just as well off. Thus, in circumstances where the ability of firms to continue employing their workers is in doubt, employees might be willing to take significant wage cuts to increase their job security. There have been some examples of this in recent years.[13]

The trade-off between security and income suggests that 'one size fits all' employment contracts are suboptimal for both workers and employers. Because there is variation in risk aversion—some workers prefer high wages and lower security, whereas others prefer more security and lower wages—a 'one size fits all' employment contract provides some workers with more security but less pay than they would prefer, while others have less security but more pay than is optimal for them.

Better for both parties would be tailored employment contracts offering alternative combinations of pay and security (with a legally enforceable condition that if the business were to contract, low security workers would be laid off first). If workers could choose trade-offs between pay and security, risk-averse workers would choose higher security and lower pay, while risk-comfortable workers would choose lower security and higher pay. Redistributing wages and security more efficiently would increase the subjective benefit that the employer creates by a given expenditure on wages. That creates a surplus in the sense that the employer could create the same subjective benefit while paying less in wages to his workforce as a whole, or workers could enjoy more benefits without the employer paying a higher wage bill overall.[14] Thus there is room to split the benefits, to the gain of both with the employer (who pays a lower gross wage bill) and the workers (who would get a more satisfying combination of wages and security than on a 'one size fits all' arrangement).

This discussion assumes that the workers preferring security and those preferring higher wages are equally good employees. If however, those preferring security tend to be lower quality workers, that would reduce the potential gains, since the best workers would be laid off first. On the other hand, if better workers value security, that would increase the gains. A preliminary analysis suggests a little of both: more educated workers value security less (and so would be laid off first) but highly committed workers value security more (and so would be laid off last).[15] There seems to be no selectivity by age or sex: old and young value security equally, as do men and women. So there seems to be a real possibility for an arrangement that benefits both workers and employers.

These findings also have implications about suboptimal combinations of pay and security stemming from the fact that pay is taxed but job security is not. In particular, the increasing taxation during the expansionary phase of the welfare state from the end of the War through the middle 1980s may have led compensation packages to over-emphasise job security. As income tax rises, employers have to pay out more to give their workers the same level of net income (and income satisfaction). But security is not taxed, so its 'price' to the employer doesn't change so much. As a result of this tax distortion, companies may have been tempted to offer, and workers tempted to seek, too much security and too little pay. This would be more so in places where income taxes are very high, such as Sweden or much of Europe. By contrast, lower tax environments such as that of the United States should yield higher incomes and less security, as, in fact, they generally seem to do.

Another important issue in considering ideal blends of security and income in compensation packages is that job security matters most to the income satisfaction of workers at the bottom of the hierarchy. The impact of job security on income satisfaction decreases as salaries increase. For a worker on $10 per hour, the difference between a secure and a not too secure job is equivalent to a raise of $4.44 per hour. It also implies that the occupational upgrading that has accompanied long-term economic growth and, more recently, restructuring has moved many workers up the occupational ladder into jobs where security is less salient.

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Measurement

Measurement of security and income satisfaction is given in the text and notes to the article.

Measurement of other variables for the causal analyses: *Age* is measured in single years; *Male* is a dichotomous variable scored 1 for men and 0 for women, *Education* is measured as years of primary, secondary, and tertiary education completed; *Urban* residence measures size of place in six levels: farm, village, country town (up to 20 000 people), middle-sized city (up to 100 000 people), city (up to 500 000), metropolitan area (over 500 000), it is scored as a continuous variable; *Employment status* refers to having a job last week (the temporarily absent are counted as being employed; the self-employed are also included); Full-time is a self coded question rather than one based on hours of work and is scored 1 for those reporting themselves as

'working full-time for pay' and zero for those reporting themselves as 'working part-time for pay'; *Government worker* is scored 1 for employees of local governments, state governments, or the Commonwealth government, and zero for others; *Occupational status* is measured by Kelley's Worldwide Status Score, a widely used, internationally applicable measure of job quality ranging from 0 for the worst jobs to 100 for the best; *Trade union membership* is dichotomous variable scored 1 for current members, zero else; *Earnings* are annual income from wages, salaries and self-employment divided by the number of hours worked during the year (estimated from total weeks of work during the year and from hours worked in current job, both of which are collected as continuous variables).

Notes on data

Australia. Data are from a file pooling four rounds of the International Social Science Surveys/Australia, Australia's leading academic survey, conducted between 1989 and 1997. There are 14 433 cases in all, of whom 8418 are currently employed and so included in the analysis. In analysing the effects of job security, we use the more elaborate set of security questions in the 1994/95 and 1995/96 ISSS/A surveys with 2338 cases. These are all representative national samples of Australians in all states and territories, based on simple random samples drawn by the Electoral Commission from the (compulsory) electoral rolls. Potential respondents were contacted by mail, using a slight modification of the Dillman total response method. Non-respondents were pursued by up to 5 subsequent contacts over a six to nine-month period. Completion rates (defined as number of completions divided by number of completions plus refusals) averaged between 60 and 65%. These rates compare favourably with recent experiences in many industrial nations (e.g., the highly regarded 1989 International Crime Victim Survey averaged 41% in 14 nations and 45% in Australia). Comparison with the census shows that all four samples closely mirror the population in age, sex, education, labour force participation, occupation, industry and all other variables which can be compared. Sikora's article, below, also compares the Finnish and Polish ISEA surveys with Census data and finds that they match well.

Bulgaria. The 1997 Bulgarian edition of the International Survey of Economic Attitudes, was directed by Tsocho Zlatkov (Institute of Sociology, Bulgarian Academy of Science) and Krzysztof Zagorski (Institute of Political Studies, Polish Academy of Sciences) and face-to-face interview data were collected by trained interviewers from the Agency for Social Analysis. There are 1273 cases.

Finland. The 1994 Finnish edition of the International Survey of Economic Attitudes was conducted entirely by mail. Comparison with Census data indicates that it is representative of the population.

Poland. The 1994 Polish edition of the International Survey of Economic Attitudes was conducted in co-operation with the Institute of Political Sciences, Polish Academy of Sciences and the Centre for Social Opinion Research, Warsaw, a highly regarded quasi-government agency. K. Zagorski was principal investigator. The interviews were face-to-face, conducted by the Centre's regular staff of trained interviewers. Completion rates were over 90% and there are 2127 cases. The 1997 Polish edition of the International Survey of Economic Attitudes was conducted in early 1997 as a panel on the 1994 ISEA, by the same group and using the same methods. There are 1669 cases.

Technical notes

[1]See page 18.

[2]The questions on job security are © copyright by Jonathan Kelley, MDR Evans and Krzysztof Zagorski. They may not be used without the explicit written consent of the copyright holders.

[3]This result is from a regression analysis.

[4]Correlations between items are:

	Correlations			
	(1)	*(2)*	*(3)*	*(4)*
1. Job secure	1.00			
2. Future in company secure	.81	1.00		
3. Legally secure	.56	.55	1.00	
4. Company stay in business	.36	.39	.23	1.00

[5]To increase reliability, security is measured by an index averaging the responses to all four security questions. Scores therefore range from 0 (someone feeling very insecure on all 4 questions) to 100 (someone feeling very secure on all 4 questions), with intermediate answers getting intermediate scores.

[6]Based on a further regression analysis not shown in Figure 3.

[7]For the analysis, the items were scored in equal intervals from 'delighted' = 100 through 'terrible' = 0 and then averaged. Combining them into a scale is justified by their high inter-item correlations and by confirmatory factor analysis results not shown here.

[8]We model satisfaction with pay as a function of hourly pay, pay squared (to capture the declining marginal utility of pay), job security, job characteristics (part-time, government employment, self-employed, job complexity, dirt & danger involved), and control variables (age, sex, education, urban, and married):

Satisfaction = b_0 + b_1Pay + b_2PaySquared + b_3Security + b_4PartTime + b_5Govt + b_6SelfEmpl + b_7ComplexJob + b_8DirtyJob + b_9Age + b_{10}Sex + b_{11}Education + b_{12}Urban + b_{13}Married + e.

[9]These are standardised partial regression coefficients, and so directly comparable. The estimate for pay is a 'sheaf' coefficient combining both the linear and curvilinear effects; see Hugh P. Whitt 1986 'The sheaf coefficient: A simplified and expanded approach' *Social Science Research* 15:174–189.

[10]To assess the implications for pay packages, we rely on the regression equation (described in note 8) that estimated the impact of both pay and security on satisfaction with income. From that, we compute the expected income satisfaction of an otherwise typical person earning, for example, $10/hr in a very secure job. We then compute his expected income satisfaction if all else remained the same, but the job became very insecure. To assess the economic equivalent of this change, we then raise the income of this (now) insecure worker until his predicted satisfaction returns to its previous level. In the example, it does that at $14.44/hr.

[11]Coincidentally, this is also the typical security level for part-time workers.

[12]This result is calculated by assessing the difference in predicted values from the regression equation described in note 8 with security set to the typical level prevailing in 1989 and with security set to the typical level in 1997. We then compute how much extra income would be require to lift the 1997 level of satisfaction back to its 1989 level.

[13]For example, at the SPC canning factory in Victoria.

[14]This argument assumes that the new lay-off arrangements do not harm the employer. This is more likely to be true in industries that are cyclic. But in extremely volatile industries, offering security might be too expensive to the employer.

[15]These results come from a regression analysis of the 1995/96 data. The job commitment measure is based on the questions 'I care a great deal about how well I do my job' and 'Doing my job well is important to me'.

References

Bean, Clive. 1991. 'Comparison of National Social Science Survey with the 1986 Census' *NSSS Report*, Suppl.(2)6: 12–19.

Sikora, Joanna. 1997. 'International Survey of Economic Attitudes in Australia, Finland and Poland: Comparison with the Census'. *WwA: Worldwide Attitudes* 1997–12–31:1–8.

References to data are on page 18.