Outsourcing and the Use of Contractors: Evidence from the AWIRS

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Abstract

Data from the two rounds of the Australian Workplace Relations Survey conducted in 1989/90 and 1995 are used to examine the extent of growth in outsourced labour (or contracting out), the characteristics of workplaces which are intensive users of outsourced labour, and the sources of growth in contractor-based employment. A key conclusion reached is that growth in the incidence of outsourcing is not a function of employment growth being most rapid in those types of firms and industries which have traditionally used contractors, but instead has taken place across a wide range of workplaces.

Introduction

While the growth in importance of outsourcing and its implications for labour market arrangements have drawn widespread comment (e.g., Boreham, 1992; Gome, 1998; Quinlan, 1998), there is relatively little information or detailed research concerning the phenomenon in Australia, with most attention from researchers focused on the challenge contract labour poses for established conceptions of labour law (e.g., Brooks, 1988; Ste-

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wart, 1992; Underhill and Kelly, 1993; Creighton, 1994). Notable exceptions, however, are studies conducted by the National Institute of Labour Studies (NILS) for the Australian Taxation Office in 1994 (VandenHeuvel and Wooden, 1995; Wooden and VandenHeuvel, 1996) and a 1995 comparative study of Australian and New Zealand businesses reported in Brosnan and Walsh (1998). Each of these studies involved large surveys, either of households or of business establishments, and lead to the conclusion that the use of contractors by Australian businesses is relatively widespread, though still only accounts for a small minority of the Australian workforce.[1]

The first of the NILS studies, for example, involved an interview-based survey of households conducted by the Australian Bureau of Statistics as part of its May 1994 Population Survey Monitor. The sample was obtained using techniques parallel to those used in the monthly labour force survey, and hence the data collected should be representative of the Australian population.[2] The results from this survey, reported in VandenHeuvel and Wooden (1995), suggest that about 7.5 per cent of all Australian workers employed in the non-farm sector might be classified as self-employed contractors, though just over one-in-five of these so-called self-employed contractors actually described themselves as wage and salary earners.

If such estimates are to be believed, then the importance of outsourcing must be large indeed, given this estimate was only intended to cover the self-employed. To these self-employed must be added the many persons employed on a conventional basis by organisations that specialise in providing contract labour services. The second NILS study, reported in Wooden and VandenHeuvel (1996), involved a workplace-based survey that was designed to provide estimates using this wider definition. The results from this survey suggest that together, the various types of outsourced labour represented just over 10 per cent of total labour requirements in the non-farm sector. The sample used, however, was not representative of the total population. Most obviously, the sample was restricted to firms employing at least 100 employees. Further, this study is subject to the usual problems associated with response bias, with completed responses received from just 522 of the initial sample of 1634 businesses.

Brosnan and Walsh (1998) also reported on results from a workplace-based survey, but one which employed a much larger and more representative sample than that used in the Wooden and VandenHeuvel (1996) study. This study, however, is still subject to the criticism that responses may not be random, with useable responses received from 1440 workplaces. Given an initial 'effective' sample numbering 4588, this gives a response rate of 31 per cent (almost identical to the response rate achieved in the NILS workplace-based survey). The results from this survey suggest that contractors and consultants, defined as persons who contract to provide labour services to an organisation, but who are not direct employees of that organisation, represented only 4.2 per cent of the total labour requirements of Australian businesses.

These findings are thus at odds with the estimates reported in Wooden and VandenHeuvel (1996). Which is to be preferred, however, is not obvious. On the one hand, the more representative nature of the sample used in the Brosnan and Walsh (1998) study suggest that its estimate should be more reliable. On the other hand, the definition of contractors used by Brosnan and Walsh was vague and may not have elicited the appropriate responses. For example, no distinction was made between contractors and the employees that work for those contractors.

Note further that, apart from response problems, both studies are, in all likelihood, plagued by measurement error. Wooden and VandenHeuvel (1996), for example, were sceptical about the ability of managers in many workplaces to accurately enumerate the number of contractors employed, especially in large organisations where responsibility for outsourcing is devolved to line management. Further, quantifying the number of persons employed by contractors was thought to be problematic given the hiring organisation often has no direct control over how the work is done or who does it.

Finally, the results reported in both Wooden and VandenHeuvel (1996) and Brosnan and Walsh (1998) also suggest that the incidence of outsourcing labour requirements has been increasing during the 1990s. Wooden and VandenHeuvel, for example, found that almost 50 per cent of respondents reported a 'moderate' or 'large' increase in the total budget for contract labour over the previous five years, compared with only 15 per cent reporting a 'moderate' or 'large' decrease. Similarly, Brosnan and Walsh reported that the proportion of workplaces indicating that the incidence of contractors had increased over the five years prior to survey was at least double the proportion indicating that the incidence had fallen.

Overall, previous empirical research gives rise to highly variable estimates of the level of contractor employment in Australia. What is clear, however, is that whatever the level, it is not insignificant. Further, the research findings consistently suggest that the underlying trend in contractor-based employment is upwards. In the rest of this article, the issue of contractor-based employment is revisited using data from the two rounds of the AWIRS conducted in 1989/90 and 1995. While concerns about the quality and accuracy of these data can be raised, the AWIRS offers one important advantage — it allows comparisons over time.

The AWIRS Data and the Enumeration of Contractors

The Australian Workplace Industrial Relations Survey (AWIRS) was conducted in 1989/90 and again in 1995. Both rounds of the AWIRS were focused on workplaces and had a common structure, though a number of new features were incorporated into the 1995 survey. Readers interested in obtaining more details about these data should consult Callus et al. (1991) and Morehead et al. (1997).

In both years, the scope of the survey was restricted to exclude both workplaces operating in the agriculture, forestry and fishing industries and in the defence industry, and those with fewer than five employees. No questions, however, were asked on the use of contractors at those workplaces with fewer than 20 employees and hence the analysis is restricted to the samples of large workplaces (i.e., those with 20 or more employees).[3]

Administration of the AWIRS at these workplaces involved a combination of face-to-face interviews with managers (and where appropriate, union delegates) and a self-completion questionnaire. In total, interviews were successfully completed with management at 2004 large workplaces in 1989/90 and 2001 large workplaces in 1995. This was achieved from 2300 contacts in 1989/90 and 2547 contacts in 1995. Cooperation with the surveys was thus extremely good.

As already noted, at each of the large workplaces a number of survey instruments were administered (and by a variety of methods). One of these — the Workplace Characteristics Questionnaire — sought objective data on such factors as employment and the composition of employment. The questionnaire also requested information on the number of men and women during a specific pay period (in September 1989 and August 1995) who were:

(i) working on a contract for service basis for the workplace;

(ii) did most of their work at or from home on a contract basis; and

(iii) were paid by a placement or employment agency while working at the workplace.

These three groups can be summed to arrive at an estimate of the total number of persons hired by the firm who were contractors.

These data, however, are far from ideal. At least three criticisms can be made. First, the definitions of the various types of contractor-based employment (cited above) are quite vague, and hence conducive to the understatement of the incidence of contractor employment. Second, the exclusion of both small workplaces (fewer than 20 employees) and the agriculture sector is likely to lead to an understatement of the significance of contractors in the wider economy.[4] Third, there are good reasons to question the ability of management to provide accurate information about workers who do not appear on the payroll, especially as the AWIRS was largely concerned with issues unrelated to contractor employment. Again, this can be expected to lead to an understatement of contractor use. This problem is likely to be particularly acute where the work is performed off-site.

In general, it is suspected that the AWIRS will substantially understate the significance of contracting out. Nevertheless, and despite these concerns, the AWIRS remains the only data source in Australia which can provide comparable estimates of the extent of outsourcing for two points in time.

Growth in the Use of Contractors, 1989 to 1995

Comparison of AWIRS data for 1989 and 1995 provides support for the hypothesis that contractor-related employment has been growing. As documented in Table 1, in September 1989, contractors and their employees (including agency workers and outworkers employed on a contract for service basis) are estimated to have been in use at 47 per cent of workplaces (with 20 or more employees), and represented 3.5 per cent of the total non-farm work force (defined as employees, contractors and their employees, agency workers and home workers or outworkers) working for, or at, these workplaces. By August 1995, while the proportion of workplaces using outsourced labour had actually fallen (to 45%), the proportion of workers employed as a result of outsourcing had risen to 4.7 per cent,[5] almost two-thirds (64.3%) of whom were men. In other words, the growth in outsourcing that has occurred over this period has not been the result of an increase in the number of businesses using outsourcing, but instead has resulted from an increase in the extent of use made of outsourcing within those businesses.

Interestingly, the figures presented in Table 1 suggest that the major source of growth in contractor employment has been employment agencies. Indeed, the rise in the share of employment accounted for by other contractor organisations (including self-employed contractors) has been quite modest. Employment agencies, on the other hand, have doubled their share from 0.8 per cent to 1.6 per cent over the six-year period.

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Table 1: Growth in the Use of Contractors by Labour Type, 1989-1995

Labour type	% of workers[a]		% of workplaces[b]	
	1989	1995	1989	1995
Outworkers	0.2	0.3	3.4	4.1
Contractors and their employees	2.5	2.8	39.1	32.9
Agency workers	0.8	1.6	13.5	20.6
Total outsourced labour	3.5	4.7	46.7	45.0

Notes: a. Data weighted to reflect the total population of employees represented by the main AWIRS samples (AWIRS weighting variables are SEMPWT in 1989/90 and EMWT2 in 1995).
b. Data weighted to reflect the total population of workplaces represented by the main AWIRS samples (AWIRS weighting variables are SCQWT in 1989/90 and WPWT2 in 1995).
Sources: 1989/90 and 1995 AWIRS main workplace surveys (Workplace Characteristics Questionnaires).

In terms of the actual numbers of workers involved, the 1995 data imply an employment weighted estimate for the number of persons working as, or for, contractors, of about 244 000 which, as expected given both the narrower coverage of the AWIRS and the weaknesses in the data, is considerably less than the estimate (of 553 900) reported in VandenHeuvel and Wooden (1995).[6] The 1995 estimate, however, is 54 per cent higher than the comparable 1989 estimate and, moreover, implies an annual growth rate of 7.5 per cent. By comparison, the employee population underlying the main AWIRS sample grew at the rate of only 1.6 per cent per annum. The reality, therefore, is that the rate of growth of employment of contractors and their employees implied by the AWIRS data is substantial, and is certainly much greater (almost five times greater) than the rate of growth in the number of employees.

Contractor Employment and Workplace Characteristics

Table 2 reports estimates of the number of persons working as or for contractors, as a percentage of the total work force, in both 1989 and 1995, cross-classified by various workplace characteristics. This table suggests that both the incidence of, and growth in, contractor-related employment has not been evenly distributed across the population of firms (workplaces). The main features of Table 2 are summarised below.

(i) While the utilisation of contractors (and their employees) was noticeably less in large firms and large workplaces in 1989, it is the large firms and workplaces where the growth in contracting out since 1989 has been concentrated. Indeed, in the smallest firms (employ-

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ing fewer than 100 employees), the incidence of contractor-related employment has actually fallen.

(ii) While private sector firms are more likely to use contractors, in terms of growth it is not the distinction between the public sector and the private sector that is important. Growth in the incidence of contracting out has, instead, been concentrated in those firms, both private and public, that operate on a commercial basis (i.e., activity is undertaken for the purpose of making a profit). The incidence of outsourcing has not changed greatly at non-profit organisations.

(iii) The growth in contractor-related employment has been most marked in those workplaces established since the first AWIRS was conducted (i.e., during the five years prior to the 1995 AWIRS).

(iv) While foreign ownership appears to be relatively conducive to contracting out, growth has not been any more rapid in foreign-owned firms than in Australian-owned firms.

(v) While it is widely believed that heightened competition promotes contracting out, it is firms in the less competitive industries (as defined by the number of competitors) which appear more likely to use contractors. This relationship appears to have changed little since 1989. On the other hand, it is true that it is firms in the export sector, which presumably are most exposed to the forces of international competition, that have most rapidly expanded utilisation of contractors since 1989.

(vi) Growth in contracting out has been less marked in firms where demand has been declining. Contracting out would thus not appear to be synonymous with downsizing.

(vii) Except for those workplaces with complete or close to compete union coverage of the workforce, growth in contracting out has been most marked in relatively highly unionised workplaces, suggesting perhaps that firms have turned to contracting out as means for avoiding some of the consequences of unionisation. The decline in contracting out at workplaces where unionisation rates are close to 100 per cent, on the other hand, suggests the effectiveness of union opposition to contracting out in such workplaces. That said, the activity-based measure of union presence indicates that there is no obvious relationship between union activity and either the incidence of contracting out or growth in that incidence.

(viii) Industry patterns in both the incidence of, and growth in, contractor-related employment are highly variable. Growth has been spectacular in the mining sector (though the estimates for this sector are subject to a high degree of sampling error), and has also been quite marked in communication (albeit from a very low base), finance and insurance, transport and storage, and government administration. On the other hand, the incidence of contractor-related employment appears to have actually fallen in many areas of the services sector — notably cultural and recreational services, personal and other services, and accommodation, cafes and restaurants.

Table 2: Incidence of Contracting Out by Selected Workplace Characteristics, 1989 and 1995 (contractors and their employees as a % of total work force)

	1989	1995	% point change
Workplace size (no. of employees)			
20-49	5.2	5.3	0.1
50-99	4.9	4.1	-0.8
100-199	3.5	4.7	1.2
200-499	2.4	4.7	2.3
500+	2.4	4.6	2.2
Firm size (no. of employees)			
<100	5.0	4.4	-0.6
100-499	4.1	5.2	1.1
500-999	4.0	5.4	1.4
1000-4999	3.6	4.6	1.0
5000-9999	3.8	5.8	2.0
10000-19999	1.7	4.7	3.0
20000+	2.1	3.7	1.6
Sector / operational status			
Private commercial	3.8	5.3	1.5
Private non-commercial	4.8	4.5	-0.3
Public commercial	2.3	4.6	2.3
Public non-commercial	3.0	3.3	0.3
Age of workplace			
<2 years	3.6	6.4	2.8
2 to <5 years	3.5	6.5	3.0
5 to <10 years	4.0	4.0	0.0
10 to <20 years	2.8	4.3	1.5
20 to <50 years	3.8	5.0	1.2
50 or more years	3.3	4.5	1.2
Ownership			
Wholly Australian	3.4	4.4	1.0
Some foreign	3.2	4.8	1.6
Wholly or predominantly foreign	4.6	6.1	1.5
Competition (commercial sector only)[a]			
Many competitors	3.8	4.6	0.8
Few competitors	3.2	5.9	2.7
No competitors	6.0	6.9	0.9

Table 2 (cont'd)

	1989	1995	% point change
Nature of market (commercial sector only)[a]			
Primarily export	4.3	7.7	3.4
Primarily domestic	3.7	4.9	1.2
Demand			
Rising	3.7	4.7	1.0
Stable	2.9	4.8	1.9
Contracting	3.8	4.1	0.3
Skill requirements (time required for new employee to reach expected standard)			
<1week	4.8	6.2	1.4
1-4 weeks	2.9	5.2	2.3
1-3 months	3.6	3.9	0.3
3-6 months	3.2	4.9	1.7
6-12 months	4.6	4.2	-0.4
>1 year	2.5	5.2	2.7
Union density			
Non-union	3.7	4.5	0.8
≤ 50%	4.2	4.9	0.7
51-75%	3.4	5.6	2.2
76-98%	3.3	5.0	1.7
99-100%	2.9	2.8	-0.1
Union activity			
Non-union	3.7	4.5	0.8
No active union present	3.8	4.7	0.9
Active union present	3.1	4.7	1.6
Industry			
Mining	3.0	15.2	12.2
Manufacturing	3.5	5.4	1.9
Electricity, gas & water	5.3	5.2	-0.1
Construction	8.2	8.6	0.4
Wholesale trade	4.1	4.6	0.5
Retail trade	1.9	3.1	1.1
Accommodation, cafes & restaurants	5.7	4.8	-0.9
Transport & storage	3.4	6.6	3.2
Communication services	1.4	4.2	2.8
Finance & insurance	2.3	4.9	2.6
Property & business services	4.8	4.8	0.0
Government administration	1.9	3.6	1.7
Education	3.0	2.9	-0.1
Health & community services	4.0	5.9	1.9
Cultural & recreational services	3.9	2.0	-1.9
Personal & other services	2.4	1.5	-0.9
TOTAL	3.5	4.7	1.2

Notes: Estimates have been weighted to reflect the population of employees covered by the main AWIRS samples.

a. Administrative offices have been excluded.

Sources: 1989/90 and 1995 AWIRS main workplace surveys.

The Sources of Growth in Contractor Employment

Growth in contracting out can be the result of either structural change (i.e., changes in the composition of workplaces) or of changes in employer behaviour and preferences. In the previous section it was observed that growth in contractor-based employment has not been evenly distributed across the population of firms, which might be suggestive of the importance of structural change effects. Nevertheless, a casual inspection of the figures reported in Table 2 also indicates that with the exception of some parts of the service sector and of very highly unionised workplaces, the trend is uniformly upwards. Overall, the evidence available from the AWIRS suggest that it is changes in employer behaviour which ultimately are driving the growth in outsourcing.

There are two compelling pieces of evidence in support of this proposition. The first piece of evidence comes from the panel component of the AWIRS — a sub-sample of almost 700 workplaces that participated in the 1989/90 survey and were re-surveyed in 1995. Within the panel, contractors as a proportion of total labour requirements rose from 3.4 per cent to 5.0 per cent. In other words, the panel data over-predicts the growth in contractor employment measured in the two cross-sections. Since the panel data effectively holds constant compositional change, this finding suggests that all of the net growth in contractor employment is the result of changes in employer behaviour.

The second relevant piece of evidence comes from the results of shift-share analysis applied to the cross-section data. The results of this analysis are reported in Table 3, which summarises the relative importance for growth in outsourcing of: (i) compositional changes in employment (the 'compositional effect'); and (ii) changes in employer preferences for outsourced labour (the 'intensity effect'). The compositional effect, reported in the first numeric column, is the percentage point difference in outsourcing across the two time points that would have resulted if the share of outsourced labour in total employment within each category of employment had remained unchanged. Since this effect can take two different values depending on which year is used as the base, the average is reported.

As an example of how to interpret Table 3, consider the effect of workplace size reported in the first row. The compositional effect associated with changes in the distribution of employment across workplace size categories, reported in the first numeric column, is just 0.1 percentage points. That is, if the share of outsourced labour within each size category (5 categories) had remained unchanged, and only the composition of workplaces across different size categories had changed, the difference in the outsourced employment share between 1989 and 1995 would have been just 0.1 of a percentage point. The second column reports the intensity effect — the percentage point difference in outsourced employment across the two years that would have resulted if the composition of employment across categories of employment had remained unchanged. In this instance, the intensity is large compared with the compositional effect, indicating that there has been an expansion in use of outsourcing in firms of all sizes. The final column presents a summary figure indicating the relative importance of the compositional effect compared with the intensity effect.

Table 3: The Relative Importance of Changes in the Composition of Employment versus Changes in Employer Preferences in Explaining Growth in Outsourcing, 1989–1995

Firm/workplace characteristic	Compositional effect (% points)	Intensity effect (% points)	% of change in outsourcing explained by compositional change
Workplace size	0.1	1.2	6
Firm size	0.0	1.2	6
Sector	0.1	1.1	7
Sector + operational status	0.1	1.1	7
Workplace age	0.0	1.3	0
Ownership	0.0	1.1	1
Union density	0.1	1.3	5
Union activity	0.0	1.2	3
Industry	-0.2	1.4	-18

Overall, the figures reported in this table suggest that compositional changes have been relatively unimportant. Changes in the distribution of firms across workplace size categories, for example, account for just six per cent of the total growth in outsourced employment. Indeed, changes in industry structure actually appear to have worked against further growth in outsourcing. Growth in the incidence of outsourcing has thus been taking place across a wide range of workplace types, and is not a function of employment growth being most rapid in those types of firms and industries which traditionally have used contractors.

Conclusions

The AWIRS data confirm what many have suspected — that outsourcing is on the rise. Such trends are not surprising and are reflected in trends observed in both North America and Western Europe (Abraham and Taylor, 1996; Brewster, Mayne and Tregaskis, 1997; Sharpe, 1997).

Moreover, analysis of the AWIRS data suggests that this growth is not the result of structural change (or compositional changes) and instead reflects choices and decisions taken by firms with a wide variety of characteristics. In other words, the growth in outsourcing is primarily the result of a change in labour management practices. What has been driving this change in firms' behaviour, however, is far less obvious. Indeed, it is clear that the AWIRS data are very limited in what they can reveal about outsourcing and its growth. While an attempt is made to measure the extent of contractor-based employment, there are good reasons to be nervous about the accuracy of those estimates. More importantly, the AWIRS data reveal nothing about the nature of the work performed by the growing pool of outsourced labour, the conditions under which those workers are hired, or the impacts of outsourcing on firms and workers alike. The investigation of these issues is clearly deserving of more attention by researchers.

Finally, it needs to be borne in mind that the AWIRS data only cover the period 1989 to 1995. It is thus possible for contractor employment to have risen over this period but for the incidence of such employment to have subsequently fallen.[7] It is strongly suspected, however, that far from declining, growth in the incidence of outsourcing is likely to have accelerated since 1995. First, the evidence presented here suggests that contracting out is not synonymous with downsizing and tends to be more prevalent at firms where product demand is stable or growing, and of course, overall economic growth has been markedly stronger during the period since 1995 than in the period covered by the AWIRS. Second, the continued decline in union membership, combined with regulatory changes undermining trade union power, is likely to have weakened further the ability of organised labour to oppose outsourcing initiatives. Third, and perhaps most importantly, recent survey evidence suggests that the large majority of managers at Australian workplaces (almost 70 per cent) expect that their firms' use of outsourcing will increase over the next five years (Wooden forthcoming).

Notes

1 Survey results on the incidence of outsourcing were also presented in Benson and Ieronimo (1996), though providing such estimates was clearly not the major objective of that study. The sample size for the study, for example, was very small (n=42), the key variable provided no indication of the extent of outsourcing within the firm, and the data analysis did not indicate over what length of period outsourcing activity was being measured.

2 The survey involved an effective sample of 2752 households, with completed questionnaires obtained from 2291.

3 In both years, administration of the AWIRS to the small workplace sample involved a single telephone interview, thus severely limiting the amount of information that could be collected.

4 Economies of scale arguments suggest that outsourcing will be relatively attractive to small firms (Abraham and Taylor, 1996).

5 Morehead et al. (1997, p. 46) cite a figure of 6.5 per cent in 1995. This, however, is the number of outsourced workers as a ratio of the number of employees.

6 The AWIRS main workplace sample in 1995 represented just over 3.6 million employees. By comparison, ABS data indicate that in August 1995 there were 6.9 million employees.

7 Australian Bureau of Statistics (ABS) data on trends in the ratio of self-employed to wage and salary earners, for example, might appear supportive of such an interpretation. Self-employment, however, is an extremely poor proxy for contractor employment. First, many persons working on a contract basis are in fact employees. Second, as VandenHeuvel and Wooden (1995) have demonstrated, many self-employed contractors will describe themselves as employees to the ABS. Third, many self-employed contractors will be classified by the ABS as employees if they are also owner managers of limited liability companies.

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