



Self-Employed Contractors in Australia: Incidence and Characteristics

Staff
Research Paper

Matthew Waite
Lou Will

The views expressed in this paper are those of the staff involved and do not necessarily reflect those of the Productivity Commission.
Appropriate citation is indicated overleaf.

© Commonwealth of Australia 2001

ISBN 1 74037 053 8

This work is subject to copyright. Apart from any use as permitted under the *Copyright Act 1968*, the work may be reproduced in whole or in part for study or training purposes, subject to the inclusion of an acknowledgment of the source. Reproduction for commercial use or sale requires prior written permission from Info Products. Requests and inquiries concerning reproduction and rights should be addressed to the Manager, Legislative Services, Info Products, Department of Finance and Administration, GPO Box 1920, Canberra, ACT, 2601.

Publications Inquiries:

Media and Publications
Productivity Commission
Locked Bag 2 Collins Street East
Melbourne VIC 8003

Tel: (03) 9653 2244
Fax: (03) 9653 2303
Email: maps@pc.gov.au

General Inquiries:

Tel: (03) 9653 2100 or (02) 6240 3200

An appropriate citation for this paper is:

Waite, M. and Will, L. 2001, *Self-employed contractors in Australia: incidence and characteristics*, Productivity Commission Staff Research Paper, AusInfo, Canberra.

The Productivity Commission

The Productivity Commission, an independent Commonwealth agency, is the Government's principal review and advisory body on microeconomic policy and regulation. It conducts public inquiries and research into a broad range of economic and social issues affecting the welfare of Australians.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Information on the Productivity Commission, its publications and its current work program can be found on the World Wide Web at www.pc.gov.au or by contacting Media and Publications on (03) 9653 2244.

Contents

Acknowledgments	VI
Abbreviations and explanations	VII
Glossary	VIII
Key points	X

CHAPTERS

1 Introduction	1
1.1 Which contractors are the focus of this research?	1
1.2 The relevance of contracting to policy formation	6
1.3 Research questions addressed in this paper	8
1.4 Structure of the paper	9
2 Legal tests of employment status	10
2.1 Why is employment status debatable?	10
2.2 Employment law tests	11
2.3 Recent legal approaches to dependent contracting	13
3 Previous evidence on contracting	17
3.1 Contractors in regular ABS labour force data	17
3.2 Evidence on contracting from annual ABS surveys	18
3.3 Evidence from AWIRS	24
3.4 Evidence from other sources	25
3.5 Summary	27
4 FOES evidence on contracting	29
4.1 The <i>Forms of Employment Survey</i> (FOES)	29
4.2 Identification of self-employed contractors in the FOES	30

4.3	Identification of dependent contractors in the FOES	33
4.4	Which estimate is to be preferred?	36
4.5	Summary of dependent contractors in the FOES	36
5	Characteristics of self-employed contractors	38
5.1	Bivariate analysis of the characteristics of self-employed contractors	38
5.2	Multivariate analysis of dependent versus independent contractors	53
6	Conclusions	55
APPENDIXES		
A	Employment types in ABS data	59
B	Multivariate results	61
References		65
BOXES		
1.1	Diversity in self-employed contracting	3
2.1	The Odco example	12
2.2	The North American view	14
2.3	Security contractors in Queensland	15
FIGURES		
3.1	Growth in different forms of employment, 1978 to 2001	19
3.2	Own-account workers as a percentage of total employment, November 1978 to February 2001	19
3.3	Wage and salary earner counts: LFS and SEE, 1984 to 2000	22
4.1	Distribution of employment by type	37
A.1	Employment types in ABS data	59
TABLES		
3.1	The distribution of employment by type	23
4.1	Estimate of self-employed contractors from the FOES	32
4.2	Estimates of dependent contractors from the FOES	35
5.1	Percentage distribution of employees and self-employed contractors by FOES employment categories, August 1998	39

5.2	Percentage of persons from each FOES employment category working as employees or self-employed contractors, August 1998	40
5.3	Percentage distribution of employees and self-employed contractors by gender and age characteristics, August 1998	41
5.4	Percentage of persons with different gender and age characteristics working as employees or self-employed contractors, August 1998	42
5.5	Percentage distribution of employees and self-employed contractors by other demographic characteristics, August 1998	43
5.6	Percentage of persons with different demographic characteristics working as employees or self-employed contractors, August 1998	44
5.7	Percentage distribution of employees and self-employed contractors by occupation and industry, August 1998	47
5.8	Percentage of persons from different occupations and industries working as employees or self-employed contractors, August 1998	48
5.9	Percentage distribution of employees and self-employed contractors by employment characteristics, August 1998	50
5.10	Percentage of persons with different employment characteristics working as employees or self-employed contractors, August 1998	51
A.1	Employment categories in the FOES	60
B.1	Logistic regression results	64

Acknowledgments

The paper benefited greatly from comments on an earlier draft by the following referees: John Buchanan from ACIRRT, Lynne Williams from the Department of Premier and Cabinet in Victoria and Mark Wooden from the Melbourne Institute of Applied Economic and Social Research. All errors and omissions remain, of course, the responsibility of the authors.

We are also grateful for information provided by the Australian Bureau of Statistics, the Australian Tax Office and Ken Phillips (Independent Contractors Association).

The paper also benefited from feedback from Productivity Commission colleagues, including Richard Clarke, Maurice Glover, Patrick Jomini, Robert Kerr and Judith Sloan.

Abbreviations and explanations

Abbreviations

ABS	Australian Bureau of Statistics
ATO	Australian Tax Office
AWIRS	Australian Workplace Industrial Relations Survey
CURF	Confidentialised unit record file
FOES	<i>Forms of Employment Survey</i>
NILS	National Institute of Labour Studies
LFS	<i>Labour Force Survey</i>
SEE	<i>Survey of Employees and Earnings</i>
PAYE	Pay-as-you-earn

Glossary

Dependent contractors	Persons employed on a commercial contract but with work arrangements consistent with them being an employee.
Employees	Persons who work in someone else's business, or persons operating their own incorporated enterprise, with or without employees (ABS Cat. no. 6203.0).
Employees with leave entitlements	Persons who (a) work in someone else's business, or work in their own unincorporated business, do not invoice clients for payment and pay PAYE tax, and (b) receive paid holiday and sick leave (ABS Cat. no. 6359.0).
Employers	Persons who operate their own unincorporated enterprise, or engage independently in a profession or trade, and hire employees (ABS Cat. no. 6203.0).
Incorporated enterprise	An enterprise that is registered as a separate legal entity to its members and owners. Also known as a limited liability company (ABS Cat. no. 6359.0).
Independent contractors	Persons employed on a commercial contract and with work arrangements inconsistent with them being an employee.
Other employed persons	Persons who work in someone else's business, or work in their own unincorporated business, do not invoice clients for own payment and pay PAYE tax, and who do not receive paid holiday and sick leave, and do not consider their job to be casual (ABS Cat. no. 6359.0).
Own-account workers	Persons who operate their own unincorporated enterprise or engage independently in a profession or trade, and hire no employees (ABS Cat. no. 6203.0).
Owner–managers of incorporated enterprises	Persons who operate their own incorporated enterprise, including those who draw a wage or salary from that enterprise (ABS Cat. no. 6359.0).

Owner–managers of unincorporated enterprises	Persons who operate their own unincorporated enterprise, including those engaged independently in a trade or profession (ABS Cat. no. 6359.0).
Self-employed contractors	Employed persons who operate their own business without employees and supply labour services to clients on an explicit or implicit commercial contract basis.
Self-identified casuals	Persons who work in someone else’s business, or work in their own unincorporated business, do not invoice clients for payment and pay PAYE tax, and who do not receive paid holiday and sick leave, and consider their job to be casual (ABS Cat. no. 6359.0).
Unincorporated enterprise	A business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred (ABS Cat. no. 6359.0).

SELF-EMPLOYED CONTRACTORS IN AUSTRALIA: INCIDENCE AND CHARACTERISTICS

- Self-employed contractors are defined in this paper as those persons operating their own business, with no employees and predominantly providing labour services to their clients. They include:
 - dependent contractors (self-employed contractors with working arrangements similar to those of employees); and
 - independent contractors (self-employed contractors whose working arrangements with each client reflect a contractor–client relationship).
- The share of self-employed contractors in total employment grew at least 15 per cent over the two decades to 1998.
 - In August 1998 10.1 per cent of total employment in Australia, or 844 000 persons, worked as self-employed contractors.
- In August 1998, around 25 per cent of self-employed contractors, or 215 000 persons, were dependent contractors. This translates into a dependent contractor share of total employment of 2.6 per cent.
- Self-employed contractors are a diverse group, and differ markedly from employees in a number of ways. The major differences include:
 - gender (71 per cent are male, in comparison with 53 per cent of employees);
 - age (41 per cent are aged over 45, in comparison with 27 per cent of employees, and only 8 per cent are aged under 24 versus 22 per cent of employees);
 - occupation of employment (27 per cent work as Tradespersons, compared with 12 per cent of employees);
 - industry of employment (25 per cent work in Construction and 20 per cent in Property and business services in comparison with 4 and 9 per cent of employees, respectively); and
 - variability of earnings (73 per cent have earnings that vary from month to month in comparison with 25 per cent of employees).
- Dependent contractors have demographic and employment characteristics more like those of employees than do independent contractors. Dependent and independent contractors differ markedly on a number of characteristics including:
 - age (28 per cent of dependent contractors are aged over 45 in comparison with 45 per cent of independent contractors);
 - occupation of employment (46 per cent are employed in higher-skilled occupations in comparison with 72 per cent of independent contractors);
 - industry of employment (12 per cent work in Construction and 12 per cent in Property and business services in comparison with 29 and 22 per cent of independent contractors, respectively);
 - variability of earnings (44 per cent had earnings that vary from month to month in comparison with 83 per cent of independent contractors).

1 Introduction

The changing nature of employment arrangements in Australia is a topical issue. Many commentators have discussed the rising incidence of casual, part-time and fixed-term contract employment; labour hire companies have an increasing profile in the Australian labour market; and a rising number of employed persons work as contractors rather than employees.¹

A number of policy issues have emerged in response to the phenomenon of workers being employed as contractors, but under working arrangements more similar to those of employees. The incidence of contractor-type employment, and the characteristics of contractors, is the focus of analysis presented in this paper.

1.1 Which contractors are the focus of this research?

The term contractor is used in connection with a number of different working arrangements. For example: employees with a set date of completion are often described as fixed-term contractors; workers who negotiate an agreement on a one-on-one basis with their employer are covered by individual contracts of employment; and the managers of commercial construction sites are often described as head or principal contractors, and are responsible for the engagement and supervision of sub-contractors.

The research presented in this paper focuses on the group of employed persons known as independent contractors by Australian courts, as earners of personal services income by the Australian Tax Office and as self-employed contractors by researchers (VandenHeuvel and Wooden 1995a). These terms describe essentially the same group of employed persons. Who are they?

Employed persons can be broadly classified into two groups: 'individual units of labour (workers) and those who own or control capital (employers)' (Creighton and Stewart 2000, p. 2). As Creighton and Stewart (2000, p. 3) explain, workers can be further categorised into two groups.

¹ Examples of research in this area include ACIRRT (1999), Bray and Taylor (1991), Burgess and Strachan (1999), Campbell and Brosnan (1999), Murtough and Waite (2000) and Wooden (1998).

For the purposes of regulation, the paid workforce has traditionally been divided into two classes: those who perform work as the employees of another person or organisation; and those who contract out their services without assuming that dependent status.

The latter group are known in Australian courts as independent contractors (Creighton and Stewart 2000, p. 202).²

‘[A]t the simplest level, an independent contractor can be defined as a person who operates his or her own economic enterprise or engages independently in a profession or trade, and is engaged by a firm or organisation for some predetermined “all-inclusive” fee to provide a defined service for a specified period’ (VandenHeuvel and Wooden 1995b, p. 4–5).

The distinction between employers, defined as the owners of capital, and independent contractors can be very difficult to make. Many contractors own their own tools and/or equipment, and the charge for their services therefore reflects both the costs of their labour or skills, and the costs of their capital. Furthermore, some contractors funnel their income through a company and in the process split the income, for example with their spouse (see the example of tax paid by a contractor in construction in Buchanan and Allan 2000). In effect, that spouse is an employee of the company run by the contractor, who is therefore an employer.

The distinction between employees and independent contractors is also not always easily drawn. This is especially the case in situations where employers hire persons as contractors under employment arrangements more consistent with employee status. For reasons described in the following section and in chapter 2, these persons are not truly independent of their employer.

This situation prompted VandenHeuvel and Wooden (1994) to adopt the term self-employed contractors for the group labeled independent contractors by Australian courts, and to use the term independent contractor to describe self-employed contractors whose relationship with their client was comparable to the commercial relationship between two firms.³ Self-employed contractors whose work arrangements were similar to those of employees were labeled dependent contractors. This terminology is adopted in this paper.

² Note, a significant group of employed persons fit neither the description employer nor worker. These persons run businesses in their own right and have no employees, but earn the major part of their income from the supply of goods, rather than labour services, to consumers and/or companies. Examples include farmers, artists and small shop owners.

³ These type of workers have also been labeled ‘dependent surrogate employees’ (Burgess 1990) and disguised wage labourers (Campbell and Burgess 2001).

Note, the term self-employed denotes persons working in their own economic enterprises without employees. This is the traditional definition used by the Australian Bureau of Statistics (ABS Cat. no. 6203.0), and by VandenHeuvel and Wooden (1994, 1995a, 1995b) in their research on contractors.

While the above discussion implies that self-employed contractors are a distinct group of workers, it is important to stress that this group is diverse. Contractors work in a range of industries, and in low and high-skilled occupations, for example. Furthermore, it is sometimes difficult to distinguish between self-employed contractors and workers employed under other non-standard arrangements — for example, labour hire employees. Some examples that illustrate the diversity of self-employed contractors, and the factors that lead to their employment, are presented in box 1.1. Future research could look at a classification system that more cleanly distinguished between different types of employed persons.

Box 1.1 Diversity in self-employed contracting

Contractors in construction

Self-employed contracting is common in the construction industry, although considerably more so in housing than commercial construction (Productivity Commission 1999; Underhill 1991; Underhill et al. 2000). A range of characteristics of the industry contribute to the use of contract labour (Underhill 1991).

The production process comprises a diverse range of tasks (for example, excavation, scaffolding, concrete laying and painting) that require very different skill sets and occur at different points in the process. In addition, completion of the tasks and quality is often easily monitored. Many workers are only required at one point in a project. Production therefore tends to be carried out by a collection of subcontractors under the supervision of a head contractor or builder (Productivity Commission 1999).

Demand for housing and commercial buildings is highly sensitive to the economic cycle. The industry contains many small firms that are vulnerable to fluctuations in activity. In addition, competition among these firms can be very strong. These factors contribute to an uncertain demand environment for many producers and encourage the use of contract labour. Small establishment costs for contractors (often only transport and tools) contribute to the supply of contract labour.

Fluctuations in employment mean workers enter from other industries during periods of high labour demand. They are 'less committed to employment security, unionism and the maintenance of industry standards than core workers. They are more susceptible to offers of contract work' (Underhill 1991, p. 121). High turnover associated with the cessation of subcontractors' contracts at the completion of a project means that 'building workers tend to place a higher value on short-term remuneration' and therefore opt for contract employment (Underhill, 1991, p. 122).

(Continued next page)

Box 1.1 cont.

Self-employed contracting in this industry takes several forms. Some individuals 'contract their labour with tools of the trade to builders and building subcontractors' (Underhill 1991, p. 116). Other contractors are supplied by manufacturers with materials like doors and tiles. A less common arrangement involves workers who also supply plant and equipment.

The supply of contractors is sometimes brokered through labour hire companies (Productivity Commission 1999). See box 2.1 or Underhill and Kelly (1993) for more detail on this practice and some of the debate and legal action which it has occasioned.

Contractors supplying computer services

Many Australian organisations hire contractors to provide computer services including help desk services, hardware installation and system design and maintenance.

In some instances, specialist computing skills are only required for short periods and the hiring of permanent employees is therefore not justified by the workload (Probert and Wajcman 1991). The specialised nature of some skills, and the difficulty of hiring employees with those skills because of labour shortages, means that firms can sometimes only acquire needed skills from contractors. Probert and Wajcman (1991, p. 173) argue that, in some instances, contracts structured so that contractors are paid for output completed on time to a specific budget elicit greater productivity than might be obtained from employees. They also cite the circumvention of budgetary constraints on the hiring of employees as an explanation for the employment of contractors. And Probert and Wajcman (1991, p. 188) argue that privatisation has contributed to the use of contractors in the public sector.

A skill shortage in computing, and common systems across industries, contribute to high wages and ease of worker mobility. These factors can make contracting attractive to workers. Probert and Wajcman (1991, p. 176) cite evidence from a small survey of computing contractors that showed they also valued the capacity to control their hours of work, choose who they worked for, set their own priorities and their independence. Probert and Wajcman (1991, p. 177) also suggested that contracting represented a means for some computer specialists to gain higher pay without the managerial responsibility that tended to accompany higher paying jobs in large organisations.

Transport industry contractors: owner–drivers

The Australian road transport industry has a long history of contractor involvement. The most common form of self-employed contractors are owner–drivers. These are self-employed workers who use their own vehicle to deliver goods (Bray 1991).

The road transport industry is a highly fragmented industry due to the different distances covered (interstate, local and intrastate), types of goods moved (either general or specialist) and the needs of different transport operators (in particular the large freight forwarders, fleet operators and owner–drivers).

(Continued next page)

Box 1.1 cont.

Freight-forwarders are contracted directly by clients to provide the transport of goods at an 'all-in' price. These operators then sub-contract owner-drivers to obtain the transport services at the lowest cost.

The transport industry is characterised by strong price competition. This competition stems from the nature of the industry (low barriers to entry, including homogenous and inexpensive technology).

Firms utilise transport contractors for a number of reasons. These can be summarised as cost, risk and flexibility. Owner-drivers, as opposed to employee-drivers offer considerable cost savings as the owner-driver is only used when required for a specific task. Additionally, the cost of maintenance and purchase of capital is shifted to the contractor.

Owner-drivers are characterised by varying degrees of dependence on their clients. Some owner-drivers are required to follow complex rules of conduct, paint their vehicles in the client's company livery, work only set periods of time for their client and refuse to work for other companies. Others operate on an irregular basis for multiple clients with no set working arrangement for any individual client.

Manufacturing industry contractors: the case of outworkers

A variety of contracting arrangements exist within the metals and manufacturing industry. These range from business to business contractors supplying finished parts or components for the production process, to contractors who supply services not directly related to the production process (for example, cleaners, maintenance and distribution), to individual self-employed contractors forming an integrated part of a firm's production (Buchanan forthcoming).

The latter category includes contractors who are often described as outworkers (Ellem 1991). These contractors are paid according to the output produced and complete part (and sometimes most) of the production of a good (usually at home and using their own tools or specialist equipment), then return the item to the client for integration into the finished product.

Manufacturers use of this form of contracting may have increased since the 1970s, especially in the clothing industry (Buchanan 2001; Ellem 1991). Reasons attributed to this growth have been increasing competitive pressures on firms to reduce costs (due to cuts in protective tariffs); increases in the labour costs of continuing employees; the need for small product runs (for specialist markets); and a belief that contract labour is better quality than core factory labour (Ellem 1991).

Furthermore, there is a belief that outworkers enable firms to achieve greater flexibility of production by restricting the hiring of employees to core activities, and hiring contractors, as needed, for other tasks (Bensen 1991).

1.2 The relevance of contracting to policy formation

Self-employed contracting is of interest to policy makers for a number of reasons including the tax treatment of contractors, and the implications for labour law and worker welfare of contractors' lack of coverage under labour law.

Tax concerns

The Australian Tax Office (ATO) has been concerned about the impact on tax revenue, and the equitable treatment of tax payers, of an increase in the number of self-employed contractors. In the mid-1990s, the ATO commissioned research from the National Institute of Labour Studies (NILS) (VandenHeuvel and Wooden 1994, 1995a, 1995b; Wooden and VandenHeuvel 1996) on the incidence and characteristics of self-employed contractors.

The NILS researchers noted a perception that tax minimisation was more prevalent among self-employed contractors because employers did not withhold income tax. They also noted that self-employed contractors could claim much higher business expense deductions than wage and salary earners (VandenHeuvel and Wooden 1994, p. 2). Buchanan and Allan (2000), in an analysis of the impact on tax revenue of contracting in the construction industry, found that 'tax liabilities for individuals can be halved where they are deemed to be contractors' (p. 46).

In this context, the ATO was primarily concerned about self-employed contractors who worked like employees.⁴ This view is represented in the following statements from the Review of Business Taxation (the Ralph Report) of business taxation (Ralph 1999, p. 48–9).

There is evidence of a significant and accelerating trend for employees to move out of a simple employment relationship to become unincorporated contractors or the owner-managers of interposed entities while not really changing the nature of the employer–employee relationship. This process is known as the alienation of personal services income and moves the income received by the unincorporated contractor or the interposed entity out of the PAYE tax system. The arrangements have had the practical effect of these taxpayers claiming deductions not available to ordinary employees, and if there is an interposed entity, allows scope for income splitting. As the economic reality of the earning of their income is unchanged, their income should be taxed on the same basis as other PAYE income.

⁴ Legislation was passed in the United Kingdom in 1999 to address the concern that contracting was a means for employed persons to avoid tax liabilities. Detail on the legislation, commonly referred to as IR35, is available at <http://www.inlandrevenue.gov.uk/ir35/>, the UK Inland Revenue web site.

On 30 June 2000, legislation aimed at ensuring contractors working like employees paid tax like employees (*New Business Tax System (Alienation of Personal Services Income) Act 86 2000, No 86*) passed into law.

Broadly speaking, the *Alienation of Personal Services Income Act 2000* (No. 86) (Cwlth) requires individuals earning more than 80 per cent of their income from the provision of labour services to one client to pay tax on the same basis as employees.^{5,6} (Further discussion of this issue is presented in section 2.3.) The legislation took effect from 1 July 2000.

As a result of criticism from industry and accounting bodies the Commonwealth Government announced changes to the legislation on 9 July 2001. These permit contractors to self-assess whether they are a personal services *business* (and therefore not subject to the legislation) ‘where they derive income from producing a result, where they supply their plant and equipment or tools of trade (if required), and where they are liable for rectification’ (Treasurer’s Press Release No. 51). Rectification means that the contractor makes good any mistakes in their work. The overall impact of the legislation remains to be seen and, at the time of writing, the ATO was continuing to develop guidelines clarifying who was covered by the legislation.

Contractors and labour law

A number of State governments have been concerned about the implications for labour law and worker welfare of workers being hired as contractors under working arrangements more like those of employees. (Recent legislative action on this issue is discussed in chapter 2.)

These concerns arise because employees and independent contractors tend to be treated differently under labour market regulation.

An extensive network of rules governs the conditions on which employees can be engaged and requires employers to assume various responsibilities in relation to such workers. By and large, these obligations do not apply in the case of “self-employed” workers, who are left instead to whatever terms they are able to negotiate with those who wish to utilise their skills (Creighton and Stewart 2000, p. 3).

⁵ At the time of writing (August 2001) details of the *Act* were available from the SCALEplus database (<http://scaleplus.law.gov.au/>). Information for taxpayers was available from The New Tax System site run by the ATO (<http://www.taxreform.ato.gov.au/>).

⁶ Note, the legislation does not ‘deem an individual to be an employee for the purposes of other legislation or industrial awards’ (Costello 2000).

From a labour law perspective, the State governments' concern is that employers can avoid obligations in areas like payroll tax, superannuation, unfair dismissal and paid leave if they hire workers as contractors. This possibility exists because employee–employer arrangements are regulated by labour law, whilst contractor–client arrangements are covered by commercial law. This concern does not apply to all contractor–client relationships but to those where ‘in substance the workers frequently appear to be in an equivalent position of social subordination and economic dependence to that of ordinary employees, and so in need of those employment protection rights from which they are often excluded by virtue of having ceased to qualify as employees’ (Collins 1990, p. 354).

From a worker welfare perspective, while workers may gain through reduced tax liabilities and greater autonomy when they work as contractors, it is possible, as Creighton and Stewart (2000, p. 712–3) suggest, that some workers do not know the true value of the employment benefits foregone, and that only employers therefore gain from the contracting arrangements. The concern has also been raised that, in an environment of relatively high unemployment, workers offered contractual employment can not negotiate more attractive terms and conditions (Collins 1990).

1.3 Research questions addressed in this paper

Analyses of non-standard employment in Australia, including contracting, have been constrained by a shortage of suitable data.

Some researchers have used Australian Bureau of Statistics (ABS) data on self-employment from the *Labour Force Survey* (LFS) (ABS Cat. no. 6203.0) to analyse changes in the prevalence of self-employed contractors across time (ACIRRT 1999; Buchanan and Allan 2000). While these data have a number of drawbacks, they do provide some clues on this topic. Previous research using LFS data is assessed and updated in an exploration of the following research question.

- What changes have occurred in the proportion of employed persons working as self-employed contractors over the past two decades?

In recognition of the changing nature of employment, the ABS now includes questions designed to obtain information on non-standard forms of employment in some official data collections. A data set released in 2000, the *Forms of Employment Survey* (FOES) (ABS Cat. no. 6359.0), is one such collection. A confidentialised unit record file (CURF) of these data was used in the analysis presented in this paper to address the following four research questions.

- What proportion of employed persons work as self-employed contractors?

-
- What proportion of these contractors are dependent contractors?
 - What are the characteristics of self-employed contractors compared with employees?
 - What are the characteristics of dependent compared with independent contractors?

1.4 Structure of the paper

Determining whether an employed person is an employee or a self-employed contractor is not always straightforward. A variety of legal tests to classify the nature of an employment relationship have been developed for situations in which the status of an employed person has been disputed. These tests, and the reasons for their existence, are explained (chapter 2).

Previous research on the incidence of contracting is then summarised. The evidence on changes across time is critically appraised and updated in an assessment of changes in the recent past (chapter 3).

Estimates of the proportion of employed persons working as self-employed and dependent contractors derived using information on the characteristics of employment arrangements collected in the FOES are then presented (chapter 4). (Decisions on which employment arrangement information shed most light on dependent contracting were informed by the legal tests of employment relationships described in chapter 2.) These estimates are used in a comparison of the demographic and employment characteristics of dependent and independent contractors (chapter 5).

A summary concludes the paper (chapter 6).

2 Legal tests of employment status

The distinction between self-employed contractors and employees is not always clear cut, and is not well defined in Australian law. Australian courts and tribunals called upon to adjudicate in disputes about the nature of employment arrangements, have used a range of tests and indicators to determine whether a person is an employee or a contractor. None of these is regarded as definitive, and the tests and indicators have been applied on a case-by-case basis.

In recognition that the working arrangements of some contractors are very similar to those of employees, some Australian jurisdictions have attempted to write a distinction into law. Testing of these laws began in 2000. Jurisdictions in other countries have also grappled with the legal implications of dependent contractors.

The debate surrounding the coverage of the *Alienation of Personal Services Income Act 2000* (No. 86) (Cwlth) also illustrates the difficulties inherent in drawing a distinction between self-employed and dependent contractors.

The difficulties inherent in distinguishing between self-employed contractors and employees, reasons why distinctions are attempted, and legal approaches to dealing with the associated difficulties, are described in this chapter.

2.1 Why is employment status debatable?

Historically, disputes over vicarious liability were a significant factor in the development of legal tests to determine the nature of an employment relationship (Creighton and Stewart 2000, p. 201). Vicarious liability attributes responsibility for acts by employees to the employers who are seen to have control of their working arrangements. In contrast, contractors are liable for any damages they cause because they are seen to be responsible for their own working arrangements. More recently, disputes over employment entitlements (available to employees but not contractors), have been a more common reason for the application of these tests.

In the case of taxation, the ATO's efforts to ensure that contractors and employees working in the same way pay tax on a similar basis have necessitated descriptions of independent and dependent contractors.

2.2 Employment law tests

Since a standard legal definition that distinguishes between self-employed contractors and employees does not exist, legal delineation of the nature of employment relationships has occurred on a case-by-case basis. Courts and tribunals have drawn on a range of tests and indicators to determine whether an employment relationship is ‘of service’ (the term used by courts to describe a relationship governed by a contract of employment, or an employee–employer relationship), or ‘for service’ (the term used by courts to denote a relationship covered by commercial law, or a contractor–client relationship).

The most enduring method of determining whether an employment relationship is of service or for service is the control test. This test turns on whether an employer has the right to control the way a piece of work is executed (Creighton and Stewart 2000).¹ Contractors are engaged to deliver an outcome and, to the extent that the contract does not specify details of the delivery process, have discretion over how that outcome is achieved.

In the past, courts also used integration, consistency and economic dependency tests, with the latter two tests used infrequently. Integration turned on ‘whether the worker is an integral part of the employer’s organisation or a mere accessory to it’ (VandenHeuvel and Wooden 1994, p. 6). Consistency turned on an examination of the conditions of the contract between the worker and employer to see if they were consistent with those in a contract of employment.² Economic dependency was defined in terms of the proportion of a contractor’s earnings from one client.

In a 1986 decision, the High Court determined that both control and integration should only be one of a number of factors considered in categorising an employment relationship. In addition, the Court determined that control was the more relevant (Stevens v Bodribb 1986 CLR 160). In determining the contractual status of individuals, courts and tribunals now assess control and a range of other indicators that have included (Creighton and Stewart 2000, p. 209; Wooden and VandenHeuvel 1994, p. 7) the following criteria:

- whether the contract permits the worker to perform similar work simultaneously for other employers;
- whether the worker is free to subcontract the work, or employ someone else;
- whether the worker invoices for their work or receives wages;

¹ Application of this test has sometimes proved difficult, especially for more technologically advanced jobs (Wooden and VandenHeuvel 1994).

² VandenHeuvel and Wooden (1994) cite criticism of this test (Merritt 1982; Brooks 1988) to the effect that it is weak because of its reliance on the concept — employee — that it seeks to define.

-
- whether the payment conditions mean the worker could make a profit or loss;
 - whether the worker supplies their own tools or equipment; and
 - where responsibility for the payment of injury insurance premiums lies.

It is often not a straightforward matter to apply these tests. The issues of dependent contractors, and the changing nature of employment relationships, have posed a strong challenge to the law in this area. The Odco cases (see box 2.1) are an example of how difficult the use of tests for employment relationships has been.

Box 2.1 **The Odco example**

During the late 1980s the tests for employment status came under increasing pressure from firms exploring new forms of employment relationships. The example of the Odco Pty Ltd, or *Troubleshooters Available*, cases highlights how the courts have attempted to grapple with these increasingly complex issues.

Troubleshooters Available was formed in the mid-1970s to supply short-term contractors to the building industry. However, the critical difference between Troubleshooters Available and traditional labour hire companies was that they did not employ the workers they hired out, rather they acted as a broker for contractors. These workers were required to sign an agreement to state that they were not employees, but were paid on a weekly basis according to the work performed. The workers were responsible for deducting their own tax. However, the work undertaken by these workers was indistinguishable from that of traditional employees.

Troubleshooters Available's system of contract labour was seen by the trade unions as an attempt to undermine the position of employees in the building industry. This method of employment was then tested in the Federal Court. The unions claimed that the Troubleshooters Available workers were legally employees who were paid an all-in rate that contravened various award provisions for building industry workers.

The courts decided that Troubleshooters Available workers were not legally employees as there was no expectation of continuing employment, and that the contracts between Troubleshooters Available and the workers expressed genuine intent to achieve independence. Furthermore, Troubleshooters Available workers were not found to be employees of the hiring firm, despite control over their working arrangements resting with that firm, as the hiring builder was obliged to pay Troubleshooters Available on the completion of the work.

Although the Odco cases have demonstrated that it is possible to structure contracts so that workers perform the same work as traditional employees, but are employed as contractors, there are limits. The *Accident Compensation Act (Vic) 1985* contains provisions for groups of workers to be deemed as employees for the purposes of the Act.

Sources: Wooden and VandenHeuvel 1994; Stewart 1992; *BWIU v Odco Pty Ltd (1991)* 33 AILR 235; *Accident Compensation Commission V Odco Pty Ltd (1990)* 64 ALJR 606.

While Australian courts and tribunals have in the past used a range of tests to determine the nature of employment relationships on a case-by-case basis, some

international jurisdictions have adopted a different strategy. These jurisdictions have defined dependent contractors who meet various conditions as employees for the purposes of their labour relations laws (box 2.2).

2.3 Recent legal approaches to dependent contracting

Employment law approaches

The ill-defined legal situation of dependent contractors in Australia has led to legislative activism in a number of jurisdictions. The Queensland *Industrial Relations Act 1999* permits the Queensland Industrial Relations Commission to deem groups of individuals with ‘for service’ contractual arrangements as employees. Victoria’s *Fair Employment Bill 2000*, rejected by the Victorian Parliament in April 2001, contained similar provisions. At the time of writing (August 2001), similar provisions were proposed for New South Wales.

Deeming provisions are different from common law tests because they are designed to classify groups of workers with for service contracts as employees. Common law tests can only be applied to individuals on a case-by-case basis. In the Queensland legislation, the Industrial Relations Commission can deem employees if it is demonstrated that the contract has been designed to avoid the terms of an award or agreement. The Commission also has to consider the established common law tests of the nature of an employment arrangement when making a decision.

At the time of writing (August 2001), there had been little opportunity for the practical effect of the Queensland legislation to be demonstrated. The test case for the legislation (AWU and Hammonds Pty Ltd No. B885 of 1999), demonstrated the reluctance of the Queensland Industrial Relations Commission to apply the deeming provisions contained in S275 of the Queensland *Industrial Relations Act 1999*. Rather, this case demonstrated the preference for the courts to utilise the already established common law tests to determine the contractual status of groups of workers. However, in a subsequent case (ALHMWU and Bark Australia Pty Ltd No. B1064 of 2000) the Commission deemed a group of subcontractors to be employees (box 2.3).

Box 2.2 The North American view

The legal status of dependent contractors has been discussed at length in North American jurisdictions. In Canada, dependent contractors are defined as a group of employees for the purposes of provincial labour law.

"[D]ependent contractor" means a person, whether or not employed under a contract of employment, and whether or not furnishing tools, vehicles, equipment, machinery, material, or any other thing owned by the dependent contractor, who performs work or services for another person for compensation or reward on such terms and conditions that the dependent contractor is in a position of economic dependence upon, and under an obligation to perform duties for, that person more closely resembling the relationship of an employee than that of an independent contractor (*Ontario Labour Relations Act, 1995*).

This definition encompasses the common law indicators used in Australian courts, and embraces the issue of economic dependence, something that Australian courts have been reluctant to consider in tests of employment status.

The United States has a different interpretation of the status of dependent contractors. As in Australia, there is no definition of dependent contractors, and courts are left to decide if an individual is an employee or an independent contractor. However, unlike in Australia, for the purposes of the *Federal Fair Labor Standards Act (FLSA)*, courts are given instructions on how to interpret various indicators of dependence and, in particular, the issue of economic dependence.

There are six factors for determining whether a worker is an "employee" under the FLSA, as opposed to an independent contractor:

- the degree of the purported employer's right to control the manner in which the work is performed;
- the purported employee's opportunity for profit or loss depending upon managerial skill;
- the purported employee's investment in equipment or materials required for the work;
- whether the service rendered requires special skills;
- the degree of permanence of the working relationship; and
- whether the service rendered by the worker is an integral part of the alleged employer's business.

The court must consider whether, as a matter of economic reality, a worker is dependent on the business to which a service is rendered for continued work (*Fair Standards Labor Act*).

These examples indicate the different approaches used to determine the contractual status on dependent contractors. Similarities exist between Australia and others, with respect to the common law indicators used to determine employment status. Significant differences exist, however, particularly with respect to the reluctance of Australian courts to use economic dependency as a criteria for judging an employment relationship.

Sources: Fair Labor Standards Act 1995; Ontario Labour Relations Act, 1995; British Columbia Labour Relations Code, 1996

Box 2.3 Security contractors in Queensland

In February 2001, the Queensland Industrial Relations Commission (IRC) deemed a group of subcontractors to be employees (ALHMWU and Bark Australia Pty Ltd No. B1064 of 2000). The subcontractors were employed by a security contractor to deliver security services, and worked alongside employees of the company, performing the same work as those employees. The subcontractors signed a standard form contract, while the employees were engaged under a certified agreement.

The Queensland IRC found that the subcontractors lacked the characteristics usually associated with subcontractors. They did not advertise in the yellow pages, operate business accounts at their banks, or have registered business names or trademarks, and they operated as sole traders. The subcontractors were paid on a weekly basis in arrears, on the submission of an invoice, and tax was not withheld from their earnings, in contrast to employees who were required to submit pay sheets and for whom tax was deducted. The Queensland IRC also found that the subcontractors received a lower rate of pay, and did not receive benefits like annual leave, sick leave or long service leave received by the employees.

An alternative approach to deeming contractors as employees has been the use of provisions to declare contracts void or varied under certain circumstances. For example, Section 106 of the *Industrial Relations Act 1996* (NSW) gives the Industrial Relations Commission of New South Wales power to declare void or varied any contract “whereby a person performs work in any industry” if that contract is found to be unfair. Unfair contracts are defined in the Act as harsh or unconscionable, or against the public interest or, if that contract ‘provides a total remuneration that is less than a person performing the work would receive as an employee performing the work’ (*Industrial Relations Act 1996* (NSW), s. 105).

The use of unfair contracts regulation was designed to protect conditions under which work is performed in areas where one party has a greater market power than the other, for example owner-drivers (Bray 1991). Unfair contracts legislation is not restricted to self-employed contractors. Indeed, these regulations apply to a wide variety of commercial operations including franchise agreements, partnerships and commercial leases, copyright agreements and even superannuation agreements (Nomchong 1998).

The ATO definition of dependence

The *Alienation of Personal Services Income Act 2000* (No. 86) (Cwlth) legislation affects ‘entities that earn personal services income and are not personal services businesses’. In its initial form, the legislation required that any entity that earned more than 80 per cent of its income from one source seek a determination from the

ATO of whether or not it was a personal services business (and therefore not subject to the new legislation).

Any one of the following four characteristics was grounds for a determination that an entity was a personal services business (and therefore considered to have a contractor–client relationship and required to pay company tax):

- two or more unrelated clients;
- one or more employees;
- separate business premises from their employer/s; and
- that it was contracted to produce a result, supply its own plant and equipment or tools of trade, and was liable for the cost of rectifying defective work.

Under changes announced by the Commonwealth Government on 9 July 2001 (Treasurer’s Press Release No. 51), entities can now self-assess whether or not they are a personal services business, against the criteria listed above.

Workers compensation and self-employed contractors

Different statutory authorities across Australia are responsible for the deeming of individuals with respect to workers compensation legislation. The Victorian statutory authority responsible for the implementation of the *Accident Compensation Act 1985* (Vic) is Workcover. The Act defines certain groups of self-employed contractors as employees for the purposes of the Act. The tests used to deem a contractor as an employee are similar to those used by Australian courts to delineate between contractors and employees. Importantly, the client of a contractor deemed to be an employee is responsible Workcover premiums (see box 2.1).

Summary

The issue of whether an employment relationship is of service or for service has been disputed in many contexts, including employment entitlements, tax payer status and liability for workers compensation premiums. The lack of a universally accepted method for classifying employed persons by employment status is a reflection of the diversity of employment arrangements and the changing nature of these arrangements.

3 Previous evidence on contracting

Researchers investigating contract employment have had to deal with a lack of suitable data in the official Australian Bureau of Statistics (ABS) labour force collections. A perception that contractors were not a large proportion of the labour force, and the identification problems noted in chapter 2, have meant that until 1998, the ABS did not collect data specifically on contracting.

Some researchers have therefore used data on own-account workers (or self-employment) as a proxy for contract employment. Some have analysed employer responses to the Australian Workplace Industrial Relations Surveys (AWIRS) and others have collected data through surveys of employees or employers. The result is a range of estimates of the share of self-employed contractors in employment, derived using a range of definitions of contractors and employment, and drawn from a range of data sources. This research is summarised in this chapter.

In the course of this summary, research on changes in the number and percentage of self-employed contractors in the workforce is updated and extended. From a policy perspective, a change in the percentage of employed persons working as contractors might be more interesting than a change in their number, because the former would indicate a change in employer and/or employee behavior, and would be consistent with a change in the nature of employment in Australia.

3.1 Contractors in regular ABS labour force data

The ABS has published information on the employment status of employed persons on a quarterly basis since 1978 in the *Labour Force Survey* (LFS) (ABS Cat. no. 6203.0). In these data, employed persons are classified as employees, own-account workers (previously known as the self-employed) and employers.¹ (A fuller description of the employment status information collected by the ABS is presented in appendix A.)

¹ An own-account worker is defined in the LFS glossary as ‘a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees’.

Some studies have used the data on own-account workers to analyse changes in self-employed contracting across time (ACIRRT 1999; Buchanan and Allan 2000). However, as VandenHeuvel and Wooden (1995a, p. 265) note, own-account employment should not be treated as synonymous with self-employed contracting because:

- many own-account workers are not contractors: for example artists, farmers and shop owners;
- some people who work on a contract basis are owner-managers of incorporated enterprises and, as such, draw a salary from that business. These individuals are classified as employees in the standard ABS statistics;
- some dependent contractors are paid on a regular basis and may therefore view themselves as wage and salary earners (or employees), rather than as own-account workers, when responding to a survey;^{2,3} and
- some employed persons classified as employers hire only family members, but perform the majority of the work themselves and are more appropriately classified as own-account workers.

In other words, within the ABS standard labour force data, self-employed contractors form part of the own-account worker, employee and employer categories of employed persons. Analyses of changes in the number of self-employed contractors over time using LFS data must therefore consider changes within each employment category. However, the majority of self-employed contractors are within the own-account worker category. Using data from 1994, VandenHeuvel and Wooden (1995a) estimated that almost 70 per cent of self-employed contractors were classified in this category of the LFS.

3.2 Evidence on contracting from annual ABS surveys

Own-account worker data

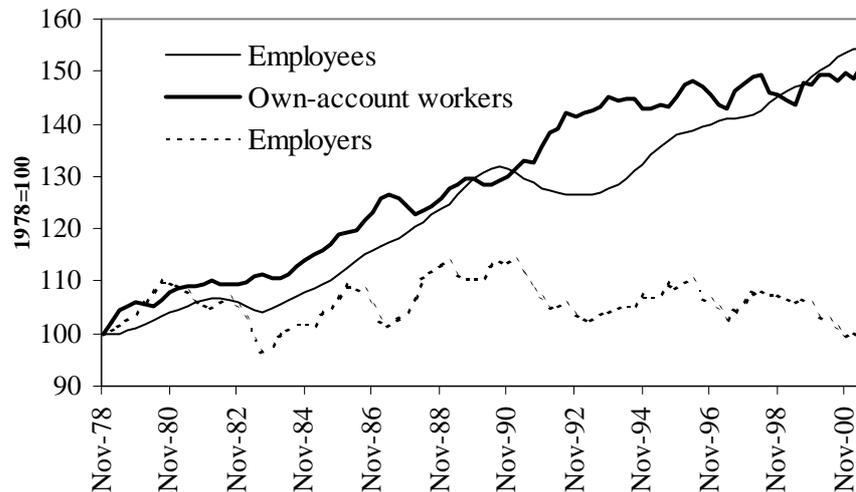
The number of own-account workers grew markedly from around 555 000 in February 1978 to about 884 000 May 2001 (figure 3.1). However, because growth in the number of employees outstripped that of own-account workers during the

² VandenHeuvel and Wooden (1995a) suggest this may particularly be the case for contractors who were previously employees of a business.

³ VandenHeuvel and Wooden (1994) spoke with six self-employed contractors in the course of their research. Three of the six viewed themselves to be employees.

second half of the 1990s, the share of own-account workers in total employment fell in the second half of the 1990s (figure 3.2).

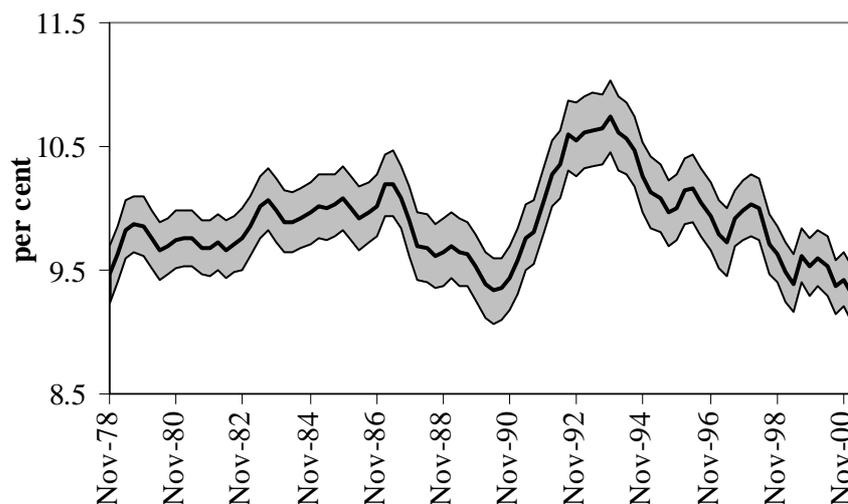
Figure 3.1 **Growth in different forms of employment, 1978 to 2001**^{a,b}
Four quarters to November 1978=100



^aEmployees include wage and salary earners and contributing family workers. ^bA four-quarter moving average was used to smooth fluctuations in the original series.

Data source: ABS (*Labour Force, Australia*, Cat. no. 6203.0), downloaded from DX.

Figure 3.2 **Own-account workers as a percentage of total employment, November 1978 to February 2001**^{a,b,c}



^aEmployees include wage and salary earners and contributing family workers. ^bPoint estimates of own-account employment as a percentage of total employment are represented by the thick dark line. The grey area around this line represents the 95 per cent confidence interval for the point estimates. ^cA four quarter moving average was used to smooth fluctuations in the series.

Data source: ABS (*Labour Force, Australia*, Cat. no. 6203.0), downloaded from DX.

While the share of own-account workers in total employment fell in the second half of the 1990s, it is still possible that the share of contractors among own-account workers, and therefore in total employment, rose.

Changes in the distribution of own-account workers by industry in the period between 1985 and 2000 were consistent with an increasing share of contractors among employed persons. For example, contractors are relatively common in Construction (VandenHeuvel and Wooden 1995a; Buchanan and Allan 2000) and Property and business services (VandenHeuvel and Wooden 1995a). The share of own-account workers accounted for by these industries rose between 1985 and 2000 (ABS Cat. no. 6203.0) from 23.9 to 35.7 per cent. Further, the share of own account employment in the Agriculture, Wholesale trade and Retail trades industries fell from 20.5 to 13.4 per cent. These industries account for only a small share (14 per cent in 1994) of self-employed contractors (VandenHeuvel and Wooden 1995a).

Employee data — owner–managers of incorporated enterprises

Because owner–managers of incorporated enterprises are paid a wage or salary by their business, they are classified as employees in the standard LFS data. Some owner–managers of incorporated enterprises work as self-employed contractors, so changes in this type of employment reflect changes in self-employed contracting.

The number of owner–managers of incorporated enterprises, and the share of this group in total employment, more than quadrupled between February 1978 and June 2000.

In February 1978, 110 700 persons, or 1.8 per cent of employed persons, worked as owner–managers of incorporated enterprises (ABS 1997b). By August 1998 the number had risen to 590 900, or 7 per cent of employed persons (ABS Cat. no. 6359.0), and by June 2000 to 660 100, or 7.6 per cent of employed persons (ABS Cat. no. 6361.0).

In February 1978, almost 30 per cent of owner–managers of incorporated enterprises, or 0.5 per cent of employed persons, were own-account workers (had no employees). By comparison, in August 1998 1.3 per cent of employed persons were owner–managers of incorporated enterprises, employed on their own-account, *and* working on a contract basis. It is therefore clear that self-employed contracting within this employment category rose both in absolute terms, and as a share of total employment, in the two decades to August 1998.⁴

⁴ Furthermore, as the ABS noted (1997b, p. 1), the tendency for owner-managers of incorporated enterprises to describe themselves as employees leads to an underestimation of this group.

Note, because owner–managers of incorporated enterprises are classified as employees in the standard LFS definitions of employment, own-account employment within the LFS is understated. If own-account workers within the owner–managers of incorporated enterprises category are added to own-account workers identified in the LFS, then own-account workers constituted 9.7 per cent of total employment in February 1978 (ABS 1997b) and 11.8 per cent in August 1998 (ABS Cat. no. 6359.0) — a 20 per cent increase between those two points in time.

Employee data — dependent contractors

The LFS does not contain data which permit the identification of self-employed contractors who incorrectly believe that they are employees, and so are recorded as such in LFS data. To get insight into this issue, VandenHeuvel and Wooden (1994) compared data on wage and salary employment from the LFS and the *Survey of Employees and Earnings* (SEE) (ABS Cat. No. 6248.0) for the period 1983–93.

The aim of the exercise was to test whether the tendency for self-employed contractors to classify themselves as wage and salary earners had changed across time. Data in the LFS are collected from individuals, whereas data in the SEE are collected from employers. VandenHeuvel and Wooden argued that the data from employers provided a more accurate estimate of wage and salary employment because employers knew who was a wage and salary earner, and who was a contractor. In contrast, they argued that some individuals would incorrectly indicate they were wage and salary earners, when in fact they were contractors.

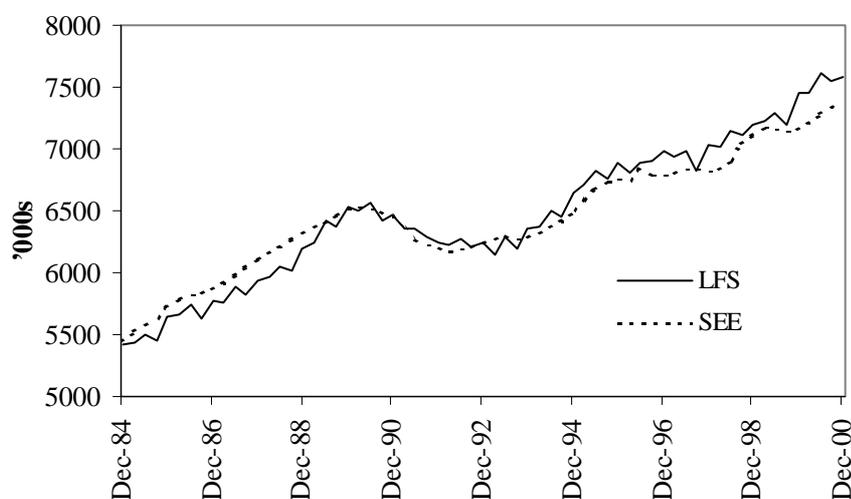
VandenHeuvel and Wooden therefore argued that a gap between the wage and salary earner series from the SEE and the LFS, with a higher incidence of wage and salary employment in the LFS, would be consistent with some self-employed contractors incorrectly classifying themselves as employees.

A plot of LFS and SEE data for the period 1984 to 2000, however, reveals no significant difference between the series (figure 3.3).⁵ Following VandenHeuvel and Wooden’s (1994) reasoning, the data indicate no change in the share of dependent contractors among wage and salary earners over the 15 years to 2000.⁶

⁵ While the series are not an exact match the differences between them are not statistically significant at the 95 per cent level.

⁶ Substantial revisions by the ABS to SEE data published in March 1997 account for the opposite conclusion reported by VandenHeuvel and Wooden (1994).

Figure 3.3 Wage and salary earner counts: LFS and SEE, 1984 to 2000^a



^a The data are trend figures and exclude the Agriculture, forestry and fishing sector.

Data sources: ABS (Labour Force Survey, Cat. no. 6203.0; Survey of Employees and Earnings, Cat. no. 6248.0)

Employer data

The employer category of the LFS consists of owner–managers of unincorporated enterprises who have employees. This group fell as a share of employed persons from 5.4 to 3.6 per cent between February 1978 and February 2001. This could be consistent with a fall in the incidence of self-employed contractors described by VandenHeuvel and Wooden (1995a) as employers who hire family members, but who perform the majority of the work themselves.

However, employed persons of this type are also classified in the employee category of the LFS, because some owner–managers of incorporated enterprises who have employees fit VandenHeuvel and Wooden’s description. As described above, owner–managers of incorporated enterprises rose as a share of employed persons between 1978 and 2000. These data partly reflect an increase in the proportion of businesses that are incorporated.

If owner–managers of incorporated enterprises with employees are added to the LFS measure of employers, the share in total employment of employed persons with employees rises from 6.7 per cent in February 1978 (1.3 per cent from owner managers of incorporated enterprises with employees plus 5.4 per cent from employers) to 8.6 per cent in August 1998 (5 per cent from owner managers of incorporated enterprises with employees plus 3.6 per cent from employers). It is impossible, however, to determine what proportion of these employed persons

would more appropriately be described as self-employed contractors, and whether this changed across time.

Has self-employed contracting become more common?

Self-employed contractors are classified within the own-account worker, employee and employer categories in standard ABS labour force data.

A quick look at the LFS data indicates that own-account workers and employers fell as a share of total employment between February 1978 and August 1998 (ABS 1997b, Cat. no. 6359.0). However, the raw data are deceptive. Owner-managers of incorporated enterprises can effectively be working either on their own account or as employers, but because they are employees of their own business they are classified into the employee category of the LFS data. If they are redistributed into the own-account worker and employer categories it is clear that these forms of employment became more common in the two decades to 1998 (table 3.1).⁷

Table 3.1 **The distribution of employment by type^a**
Share of total employment

	February 1978	August 1998
	%	%
Employers	6.7	8.6
Own-account workers	9.7	11.8
Employees	83.6	79.6

^aOwner-managers of incorporated enterprises have been redistributed from the employee category of LFS data to the own-account worker and employer categories.

Sources: ABS ('Owner managers of incorporated enterprises', Feature article, *Labour Force, Australia*, Cat. no. 6203.0, July; *Forms of employment survey*, ABS Cat. no. 6359.0).

Using VandenHeuvel and Wooden's (1995a) estimates, almost 50 per cent of own-account workers, 11 per cent of employers and 2 per cent of employees in 1994 were self-employed contractors. Assuming that self-employed contractors represented a similar percentage of each type of employment in 1978, their share in total employment in that year was about 7.3 per cent. Similar calculations for 1998 return an estimate for the share of self-employed contractors in total employment of 8.4 per cent — a 15 per cent increase.⁸

⁷ While the data in table 3.1 represent only two points in time, and are potentially a reflection only of those points, and not a long-run trend, the ABS (1997b, figure 2) information on the growth of owner-managers of incorporated enterprises confirms a steady rate of increase.

⁸ VandenHeuvel and Wooden (1995a) concluded that self-employed contractors accounted for 7.5 per cent of total employment in 1994.

These calculations are based on the assumption that the share of self-employed contractors in each type of employment did not change across time. This is a strong assumption. Given that the share of employment accounted for by industries in which self-employed contractors are more common grew, it is likely that the increase in self-employed contracting as a share of employment has been larger than these calculations indicate. The analysis presented in chapter 4 suggests that this has been the case.

3.3 Evidence from AWIRS

The Australian Workplace Industrial Relations Surveys of 1989-90 (Callus et al. 1991) and 1995 (Morehead et al. 1997) asked employers at workplaces with 20 or more employees to estimate how many contractors and their employees they employed during a pay period immediately prior to the survey. As a measure of self-employed contractors, these data have the weaknesses that they include the employees of contractors and do not cover workplaces with fewer than 20 employees. In addition, Wooden (1999) questions the capacity of employers to accurately report on the composition of their workforce by employment status, and especially on the number of employees of contractors.

Drawing on data from the 1989-90 Survey, VandenHeuvel and Wooden (1994 p. 13) concluded that employment on a contract basis accounted for 3.3 per cent of the non-agricultural workforce in workplaces with more than 20 employees. Comparable figures from the 1995 Survey indicate that 3.6 per cent of the workforce were employed on a contract basis in that year.⁹ These data suggest a slight increase in the incidence of contracting among workplaces with more than 20 employees, although given concerns over the accuracy of the data, the increase should be viewed with caution.¹⁰

These estimates are very different from the figures on self-employment from the ABS LFS data. The difference is an indication of the weaknesses of both the LFS and AWIRS data for research on self-employed contractors.

⁹ Productivity Commission estimate from AWIRS 1995 (DWRSB 1997). This figure is calculated from data on the number of contractors and their employees at workplaces with 20 or more employees, and an estimate of the workforce at these workplaces defined to include employees, contractors and their employees, outworkers and agency workers.

¹⁰ Within the panel of firms operating in both survey years the incidence of employment on a contract basis rose from 3 per cent of the non-agricultural workforce in 1989-90 to 3.3 per cent in 1995 (Productivity Commission estimates based on AWIRS 1995).

However, the two AWIRS datasets are the only sources of comparable data on contracting from two points in time. Using these datasets, and a measure of contractors that included outworkers and agency workers, Wooden (1998, 1999) found that contract labour grew from 3.5 per cent of the non-agricultural workforce in 1989-90 to 4.7 per cent in 1995. These data are interpreted as supportive of the hypothesis that contract-related employment grew between the two AWIRS surveys (Wooden 1998, p. 36).

3.4 Evidence from other sources

VandenHeuvel and Wooden (1995a; 1995b) analyse data on self-employment specially commissioned from the ABS. The data were collected from individuals in a set of questions on contract for service employment included in the May 1994 Population Survey Monitor (PSM), and are very close to population representative.¹¹ VandenHeuvel and Wooden (1995a, p. 265) classified as self-employed contractors:

- own-account workers whose employment mainly involved the provision of services to other organisations;
- persons who classified themselves as wage and salary earners but did not pay income tax on a pay-as-you-earn basis;
- employers who employed only family members and whose work mainly involved the provision of services to other organisations; and
- persons who classified themselves as wage and salary earners but who were actually employed by their own company, which had no other employees and whose work mainly involved the provision of services to other organisations.

This definition is distinctly different from that used in the AWIRS data in that it only includes self-employed contractors. Given that the AWIRS collected data on contractors and their employees, one would have expected the AWIRS definition to deliver a considerably higher estimate of the share of total employment accounted for by contractors, but this was not the case.

VandenHeuvel and Wooden concluded that self-employed contractors constituted 7.5 per cent of the non-agricultural workforce. The difference between this figure, and the 3.3 per cent derived from AWIRS, was attributed to growth in the number of self-employed contractors between 1989-90 and 1994; the exclusion of

¹¹ The PSM excluded people in non-private dwellings, 'persons living in sparsely settled areas, diplomatic personnel of overseas governments, non-Australian service personnel stationed in Australia (and their dependents) and overseas visitors' (VandenHeuvel and Wooden 1995b, p. 8).

workplaces with less than 20 employees from the AWIRS estimates; and the poor quality of the AWIRS data on contracting (1995b, p. 12).

VandenHeuvel and Wooden then identified as *dependent contractors*, wage and salary earners who did not pay income tax on a pay-as-you-earn (PAYE) basis and self-employed contractors employed only, or predominantly, by one firm. They determined that ‘38.3 per cent of self-employed contractors, or 2.9 per cent of the total non-farm workforce, are treated by employers as contractors but in practice may be difficult to distinguish from wage and salary earners’ (1995a, p. 273).

As part of their stream of contractor research, Wooden and VandenHeuvel (1996) also surveyed large workplaces (more than 100 employees) in 1994. The survey was designed to gather information on the nature, and not the extent, of contract employment. Independent contractors were defined as ‘individuals who are self-employed or who are the *only* employee of a company they own’ (p. 170).¹² A broader definition that included the employees of contractors and agency workers was also used to collect data. Self-employed independent contractors were estimated at 2.9 per cent of total employment at the firms sampled. Using the broader definition, contractors were estimated to be 10.3 per cent of total employment at the firms sampled. The inclusion only of large firms in the survey, and the survey’s low response rate (32 per cent), mean that the estimates must be viewed with caution.

Brosnan and Walsh (1998) surveyed the employment characteristics of Australian and New Zealand workplaces in 1995. They concluded that 4.2 per cent of the Australian labour force were employed as contractors/consultants — defined as ‘persons not your direct employees who contract to provide labour services to your organisation (whether or not they provide their own tools or equipment)’ (p. 29).^{13,14}

But, as Wooden (1998) notes, the definition of contractors used by Brosnan and Walsh (1998) is vague, and it is not clear where the employees of contractors are classified. In addition, it is possible that Brosnan and Walsh’s data are affected by the survey respondents’ (employers) lack of knowledge about the working arrangements of their workforce.

¹² This definition describes self-employed contractors, some of whom could be dependent, as per the discussion in chapters 1 and 2.

¹³ While the term ‘labour force’ is usually used to refer to the employed plus the unemployed it appears that Brosnan and Walsh use it to refer to only to employees.

¹⁴ Brosnan and Thornwaite (1994), using the same definition, derived a similar estimate of the proportion of contractors/consultants in the Queensland ‘labour force’ in 1993.

Using information from survey questions on changes in contracting in the previous five years, both Wooden and VandenHeuvel (1996) and Brosnan and Walsh (1998) concluded that contract employment had risen as a share of total employment in the five years prior to their surveys (Wooden 1998).

Recently, the ATO (personal communication with ATO Media Office, 19 July 2001) has estimated that 166 000 employed persons, or about 2 per cent, work as employee-like contractors. The ATO derived this estimate from tax returns for 1999-2000, and it reflects the number of taxpayers deemed likely to be affected by the *Alienation of Personal Services Income Act 2001* (Cwlth).

3.5 Summary

In summary, time-series data specifically on self-employed contracting do not exist. Within the ABS time series data on different categories of employment, self-employed contractors are classified within the employee, own-account worker and employer groups, and can not be separately identified. However, these data can be used to shed light on changes across time in self-employed contracting.

Between 1978 and 1998 the shares of own-account workers and employers in total employment rose, while the share of employees fell. Using this information, and assuming that the shares of self-employed contractors in each type of employment were the same in 1978 and 1998 as those reported by VandenHeuvel and Wooden (1995a) for 1994, the share of self-employed contractors in total employment rose from about 7.3 per cent in 1978 to 8.4 per cent in 1998 — a 15 per cent increase.

Furthermore, own-account employment growth has been higher in industries in which self-employed contracting is relatively common. It is therefore likely that the share of self-employed contracting in own-account employment has risen. Because the majority of self-employed contractors (70 per cent according to VandenHeuvel and Wooden (1995)) are classified as own-account workers, it is therefore likely that the share of self-employed contractors in total employment has grown to more than 8.4 per cent. This is confirmed by the analysis presented in the following chapter.

Evidence from cross-section data suggest an increase in contracting generally, but the comparable data from more than one point in time (the AWIRS surveys) do not permit a clean identification of self-employed contractors.

Researchers have used a range of sources and a range of definitions to study contractors. Surveys of workplaces from the mid-1990s yield estimates of between 4.2 and 10.3 per cent for the share of contractors (defined differently by different

researchers) in total employment (defined differently by different researchers). The VandenHeuvel and Wooden (1995a; 1995b) analysis of data collected from individuals, using information on employment characteristics to determine employment status, indicated contractors comprised 7.5 per cent of total non-farm employment in 1994.

The latter research is closest in nature to the work undertaken in the current research and reported in the following chapter. It provides a useful comparison point for the estimates presented.

4 FOES evidence on contracting

In 2000, the ABS released a new data set, the *Forms of Employment Survey* (FOES), designed to collect data on employment arrangements. This type of information permits more accurate estimation of contractor numbers than employment status reports from workers or employers. Estimates of the incidence of self-employed, independent and dependent contractors derived from the FOES are presented in this chapter. A summary of the FOES precedes presentation of these estimates.

4.1 The *Forms of Employment Survey* (FOES)

The FOES was conducted in August 1998 as a supplement to the *Labour Force Survey* (LFS) (ABS Cat. no. 6203.0), and the data were published in February 2000 as *Forms of Employment* (ABS Cat. no. 6359.0). The data were collected from 28 519 employed persons aged 15 years and over, in either face-to-face or telephone interviews.¹ Contributing family workers, and persons working only for payment in kind, were not interviewed.² And only a limited amount of information on employment in addition to a respondent's main job was collected.³

The FOES gathered more detailed data on work arrangements than is collected by the ABS in its regular *Labour Force Survey*. The FOES data include information on the socio-economic characteristics of employed persons and the characteristics of their employment arrangements. A set of weights that can be used to generate population representative estimates accompanies the data.⁴

¹ The usual LFS sample exclusions apply — defence force personnel, diplomatic staff from overseas, overseas residents in Australia, members of non-Australian defence forces (and their dependents) stationed in Australia.

² The exclusion of contributing family workers has little impact on the estimates presented in this chapter. Less than 1 per cent of employed persons in August 1998 were employed in this way (ABS Cat. no. 6203.0).

³ This means that persons who do some work on a contract basis in addition to working as employees can not be identified. Insight into this phenomenon was not possible at the time of writing, however the Survey of Employment Arrangement and Superannuation (SEAS) CURF to be released in mid-2001 should be a source of relevant data.

⁴ A second FOES is scheduled for November 2001.

4.2 Identification of self-employed contractors in the FOES

Using information collected from respondents, the ABS classified employed persons into one of five categories:

- employees with leave entitlements;
- self-identified casuals;
- other employed persons;⁵
- owner–managers of incorporated enterprises; and
- owner–managers of unincorporated enterprises.

More detail on these categories is presented in appendix A.

Self-employed contractors are potentially located in all of these categories. While they are most likely to have been classified as owner–managers, those who viewed themselves as wage and salary earners because the fee for their services was being paid on a regular basis, could have been classified into the employees with leave entitlements, self-identified casuals and other employed persons categories.

The inclusion in the FOES of information on the characteristics of a person’s employment permits the derivation of an estimate of self-employment contracting — the goal of work presented in this chapter. However, because the FOES collected different information from employees with leave entitlements and self-identified casuals than from persons in the other employment categories, a range of approaches to deriving this estimate was adopted in this analysis.

First, following VandenHeuvel and Wooden (1995a), employees with leave entitlements and self-identified casuals who did not have PAYE tax deducted from their earnings, and who earned more than the tax free threshold, were classified as self-employed contractors.⁶ The fact that PAYE tax was not deducted from their earnings indicates that they were not in a conventional employee–employer relationship. In addition, the fact that they reported working for an employer for wages or salary is assumed to indicate that they did not employ others, and were therefore own-account workers.

⁵ This category primarily comprises persons classified as casuals in the standard LFS data, but who did not self-identify as such in the FOES.

⁶ The tax free threshold in 1998 was \$5400. Weekly pre-tax earnings are reported in bands in the FOES. Persons earnings less than \$100 a week, or the equivalent of up to \$5200 a year, were assumed to have earnings below the threshold.

Second, information on working arrangements available for other employed persons (and not sought in the FOES from employees with leave entitlements and self-identified casuals) was used to derive an estimate of self-employed contractors within this category. Persons who reported working on a contract basis, but not on a fixed-term contract, were included in the estimate of self-employed contractors.^{7,8}

Third, owner–managers of unincorporated and incorporated enterprises who reported working on a contract basis, and without employees, were classified as self-employed contractors.

Fourth, owner–managers of unincorporated enterprises who reported that they did not undertake contract work, but who indicated that they invoiced or billed clients for their own payment, and who had no employees, were also included in the estimate of self-employed contractors. These employed persons were assumed to have an implicit contract with their clients. For example, a gardener who provides services to a household may not see themselves as having a contract with that household, but the employment arrangement may be of a contractor–client, not employee–employer, nature.⁹ The fact that respondents were asked if they invoiced or billed ‘for own

⁷ The information on contractor status was collected in the question ‘Do you work on contract?’.

⁸ Of other employed persons working on a contract basis, 39 per cent reported that the contract was of fixed term. Of this group, 94 per cent reported that PAYE tax was deducted from their earnings, 88 per cent received a payslip, and 79 per cent reported that their employer had control over their working arrangements. Thirty-one per cent were employed as professionals in education. The employment profile of this group was consistent with sessional teaching — employment for a teaching year or semester and payment of an all-in fee on a regular basis. This type of employment is more consistent with casual employment than contracting. Other employed persons who worked on fixed-term contracts were therefore not classified as self-employed contractors.

⁹ A small group of owner–managers of unincorporated enterprises (230 respondents, or 63 000 persons in weighted terms) were reclassified by the ABS into the employee, casual and other employed persons categories. The ABS undertook the reclassification because these respondents did not invoice or bill clients, and had PAYE tax deducted from their earnings — characteristics common to employees (ABS Cat. no. 6359.0, p. 5). Most of these respondents (70 per cent in weighted terms), were placed in the other employed persons category. These respondents were asked questions on their employment arrangements. Unlike the rest of the other employed persons group, however, these respondents were asked if they had employees. Some did. Because own account employment is assumed in this analysis for other employed persons who indicate they work on a contract basis, these respondents were reclassified as owner–managers of unincorporated enterprises. Self-employed contractors among them were identified using the same indicators as were used for others in that group.

Responses to work arrangements questions are not reported for persons placed in the employee and casuals categories. Because these persons reported PAYE deductions, and had other characteristics that led the ABS to classify them as employees, they are not reclassified and are assumed to be employees. The group is small, 19 000 employed persons in weighted terms. Any missclassification of contractors as employees has little impact on the estimates presented.

payment' (emphasis from FOES questionnaire) should exclude most owner-managers that invoiced or billed for the provision of goods from the contractor estimate.¹⁰

In summary, self-employed contractors are identified as:

- employees with leave entitlements and self-identified casuals who did not have PAYE tax deducted from their earnings, and had earnings in excess of the income tax threshold;
- other employed persons who indicated that they worked on a contract basis;
- owner-managers of unincorporated and incorporated enterprises who worked on a contract basis and had no employees; and
- owner-managers of unincorporated enterprises who invoiced or billed for their own payment, responded that they did not work on a contract basis, and had no employees.

Estimates of self-employed contractors from the FOES are presented in table 4.1.

Table 4.1 Estimate of self-employed contractors from the FOES

<i>Employment type</i>	<i>Estimates of self-employed contractors</i>	
	000s	% of all employed persons
Employees and self-identified casuals	151.6	1.8
Other employed persons	32.5	0.4
Owner-managers working on a contract basis	416.9	5.0
Owner-managers who invoiced or billed	242.9	2.9
Total self-employed contractors	843.9	10.1

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Within the FOES data (collected in August 1998), self-employed contractors accounted for 10.1 per cent of all employed persons. This is higher than the most comparable estimate from the literature — 7.5 per cent derived by VandenHeuvel and Wooden (1995a) using data from May 1994. The difference in the estimates may reflect growth in the incidence of contracting, and/or differences in measurement methodology.

The analysis of section 3.2 supports a conclusion of growth in the incidence of contracting. Recapping, VandenHeuvel and Wooden's estimates for 1994 of the share of self-employed contractors in the standard ABS employment categories of own-account workers, employers and employees were applied to data for 1998. This

¹⁰ It is possible that some misinterpreted the question and are therefore not excluded.

led to an estimate for the share of self-employed contractors among employed persons in 1998 of 8.4 per cent — a marked increase on the 7.5 per cent in 1994.

It was also argued in section 3.2 that the estimate of 8.4 per cent for 1998 was probably too low because it was derived under the assumption that the share of self-employed contractors in each of the standard ABS employment categories had not changed between 1994 and 1998. Evidence on employment growth in sectors in which self-employed contracting was relatively common suggested that this was a strong assumption.

The differences in survey methodology, however, mean that it is not possible to conclude that all of the gap between VandenHeuvel and Wooden's 7.5 per cent estimate for 1994 and the 10.1 per cent estimate for 1998 from FOES, can be attributed to an increase in the share of self-employed contractors among employed persons.

The main area of measurement difference lies in the fact that VandenHeuvel and Wooden used information on whether owner-managers supplied services to other organisations to identify self-employed contractors within this group. The current analysis uses information on whether respondents worked on a contract basis, or invoiced or billed for their own payment. Information that would permit a closer approximation of VandenHeuvel and Wooden's methodology is not available in the FOES. The differences therefore cannot be further explained.

4.3 Identification of dependent contractors in the FOES

As discussed in chapter 2, Australian courts and tribunals use a number of tests and indicators to determine if individuals have a contract for service or a contract of service (and so are employees). Because there is no legal definition of a dependent contractor, a range of indicators has been used in determinations of this type. FOES contains information on some of these indicators and this was used to estimate the proportion of self-employed contractors that can be described as dependent contractors — that is, employed as contractors, but with working conditions similar to those of employees.

As with the identification of self-employed contractors, different approaches to identifying dependent contractors were used for different types of employed persons.

First, employees with leave entitlements and self-identified casuals who were classified as contractors were assumed to be dependent. The fact that these employed persons thought of themselves as wage and salary earners, although they

did not have PAYE tax deducted from their earnings, indicated that the nature of their employment was more employee–employer than contractor–client.

Second, information on working arrangements was used to identify dependent contractors among other employed persons and owner–managers classified as self-employed contractors.

The ABS (Cat. no. 6359.0 p. 6) classified owner–managers as ‘in some way dependent on their client’ if:

- they did not have control over their own working procedures; or
- the terms of their contract prevented them from subcontracting their work; or
- their contract prevented them from working for multiple clients.

While the ABS applied these criteria to all owner–managers, in this analysis they are used to identify dependent contractors among other employed persons and owner managers classified as self-employed contractors.¹¹ (This is one reason why the estimates presented in this paper are not comparable with the ABS estimate of owner-managers dependent on their client (ABS Cat. no. 6359.0). The other reason is that the estimate of self-employed contractors adopted in this analysis includes some employees with leave entitlements and self-identified casuals.)

The first criterion represents the control test described in chapter 2. The second and third criteria represent two of the indicators used by courts and tribunals in addition to the control test in determining whether an employment relationship is for service or of service.

The ABS classified an owner–manager as dependent if they had an affirmative response to any of the three criteria. This is a loose definition of dependence. While a lack of control over working procedures is, on its own, consistent with a dependent contractual arrangement, inability to subcontract or work for multiple clients are not. For example, a contract may restrict a person from working for others or subcontracting during the contract period for commercial reasons. This is not consistent with the concept of dependence discussed in chapter 2.

Two estimates of the incidence of dependence are therefore presented for other employed persons and owner–managers classified as self-employed contractors. In the first, the lower-bound estimate, a tighter definition of dependence is used than that adopted by the ABS. In this case, respondents are classified as dependent if:

- they did not have control over their working procedures, and were prevented from subcontracting their work by the terms of their contract; or

¹¹ Other employed persons were also asked the questions that indicate dependence.

- they did not have control over their working procedures, and were prevented by the terms of their contract from working for multiple clients.

In the second estimate, the upper-bound estimate, the ABS definition is adopted.

Third, owner–managers classified as self-identified contractors because they invoiced or billed clients and did not have employees, were classified as dependent contractors if they reported that their client had control over their working procedures. The questions on subcontracting and whether their contract permitted work for multiple clients, were not asked of these respondents because they did not see themselves as working on a contract basis.

Lower and upper-bound estimates of dependent contractors from the FOES are presented in table 4.2. The difference between the estimates illustrates the importance of the definition of dependence.

Table 4.2 Estimates of dependent contractors from the FOES

<i>Employment type</i>	<i>Lower bound</i>		<i>Upper bound</i>	
	<i>000s</i>	<i>% of all employed persons</i>	<i>000s</i>	<i>% of all employed persons</i>
Employees and self-identified casuals	151.6	1.8	151.6	1.8
Other employed persons	13.4	0.2	28.2	0.3
Owner–managers working on a contract basis	36.0	0.4	155.4	1.9
Owner–managers who invoiced or billed	14.2	0.2	14.2	0.2
Total dependent contractors	215.2	2.6	349.4	4.2

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

These estimates indicate that in August 1998, between 2.6 and 4.2 per cent of employed persons worked as dependent contractors. VandenHeuvel and Wooden’s (1995a) estimate for May 1994 of 2.9 per cent is at the low end of the range. This might be a reflection of growth in the incidence of dependent contractors and/or the differences in measurement methodology. VandenHeuvel and Wooden defined dependence for owner–managers on the basis of the provision of services to only or predominantly, one organisation. This is very different from the definitions based on working arrangements presented in this analysis. Care should be exercised in comparing these estimates.

The lower bound is also close to the 2 per cent of employed persons who work as employee-like contractors estimated by the ATO.¹² Again, differences in methodology account for the difference between the current estimate and the ATO

¹² Personal communication, 19 July 2001.

estimate. However, the ATO estimate gives grounds to think that the lower bound estimate is a more realistic reflection of the number of dependent contractors in Australia.

The incidence of dependent contractors among self-employed contractors is estimated at between 25.5 and 41.4 per cent. VandenHeuvel and Wooden's (1995a) estimate of 38.3 per cent is at the upper end of this range. This perhaps indicates that differences in method account less for the difference between the estimates presented and those of VandenHeuvel and Wooden (1995a), and that perhaps the incidence of dependent contracting has risen.

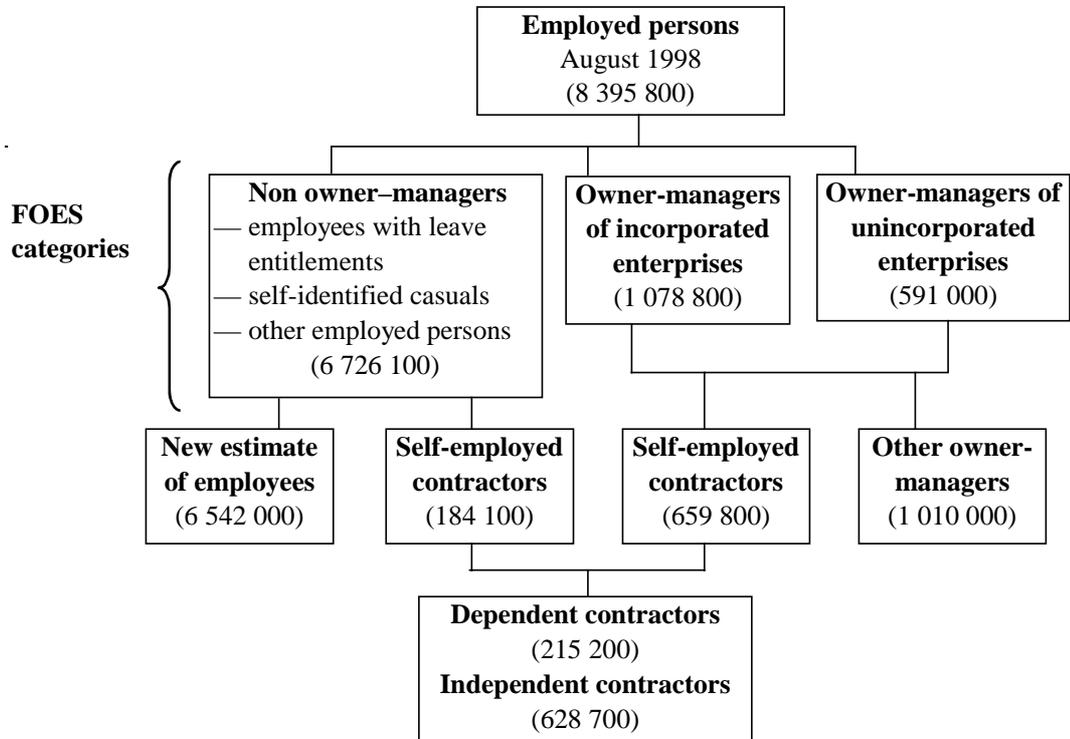
4.4 Which estimate is to be preferred?

The ABS definition of dependence, used to generate the upper-bound estimate, is a looser definition than would be applied by Australian courts and tribunals in making a decision on employment status (see chapter 2). For that reason the lower bound estimate is preferred, and is used to generate the results presented in chapter 5.

4.5 Summary of dependent contractors in the FOES

Figure 4.1 summarises the distribution of employed persons within the FOES, and includes the lower and upper-bound estimates of dependent contractors.

Figure 4.1 **Distribution of employment by type^a**
August 1998



^a Persons who work as contributing family members and only for payment in kind are excluded.

Data source: ABS (Forms of Employment Survey, Cat. no. 6359.0)

5 Characteristics of self-employed contractors

In this chapter, the demographic and employment characteristics of self-employed contractors are described and compared with those of employees (defined for the purposes of this chapter as the FOES categories of employees with leave entitlements and self-identified casuals, excluding self-employed contractors identified within these categories), and the characteristics of dependent and independent contractors are contrasted.¹

The data are presented in two ways. First, the data are presented to show the percentage of persons working in each type of employment (employees, and all self-employed, dependent and independent contractors) that has a characteristic of interest. Second, the data are presented to reveal the percentage of persons with a characteristic of interest that work in each type of employment. For example, information on gender is presented in two tables. The first table contains information on the proportions of employees and self-employed contractors that are male. The second table contains information on the proportion of males that work as employees or self-employed contractors.

5.1 Bivariate analysis of the characteristics of self-employed contractors

Employment status

The majority of self-employed contractors (78.2 per cent) are owner-managers (table 5.1), and the majority of these are owner-managers of unincorporated enterprises. These results are very similar to those reported by VandenHeuvel and Wooden (1995a) — the analysis closest in scope to this paper.

One quarter of self-employed contractors are dependent, and employed persons who are not owner-managers account for over three-quarters of this group. In other

¹ The analysis is based on the lower-bound estimate of dependent contractors. Characteristics data generated using the upper-bound estimate of dependent contractors are available from the authors on request. Similar conclusions are drawn when the upper-bound estimate is used as the basis for discussion.

words, at least three-quarters of dependent contractors would be classified as employees in the standard ABS labour force statistics.² (In contrast, VandenHeuvel and Wooden (1995a) found that only 55 per cent of dependent contractors fitted this description.)

Table 5.1 Percentage distribution of employees and self-employed contractors by FOES employment categories, August 1998^a

	<i>Type of employment</i>			
	<i>Employees</i>	<i>Self-employed contractors</i>		
		<i>All</i>	<i>Dependent</i>	<i>Independ.</i>
	%	%	%	%
FOES employment categories				
Employees with leave entitlements	77.3	10.3	40.4	n.a.
Self-identified casuals	22.7	7.7	30.0	n.a.
Other employed persons	n.a.	3.8	6.2	3.0
Owner–managers of incorp. enterp’s	n.a.	12.6	3.5	15.7
Owner–managers of unincorp. enterp’s	n.a.	65.6	19.8	81.3
Total (%)	100.0	100.0	100.0	100.0
Total (000s)	6275.0	843.9	215.2	628.7

n.a. not applicable ^a‘Employees’ include employees with leave entitlements and self-identified casuals.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Looking at the data in another way, 49.3 per cent of owner-managers of unincorporated enterprises are self-employed contractors, in contrast with 1.8 per cent of employees (table 5.2). However, only 3.8 per cent of owner-managers of unincorporated enterprises are dependent contractors.

² Recall that owner-managers of incorporated enterprises would also be classified as employees.

Table 5.2 Percentage of persons from each FOES employment category working as employees or self-employed contractors, August 1998^{a,b}

	<i>Type of employment</i>				<i>No. of employed persons</i>
	<i>Employees</i>	<i>Self-employed contractors</i>			
		<i>All</i>	<i>Depend.</i>	<i>Independ.</i>	
	%	%	%	'000	
FOES employment categories					
Employees with leave entitlements	98.2	1.8	1.8	n.a.	4 940
Self-identified casuals	95.7	4.3	4.3	n.a.	1 487
Other employed persons	n.a.	12.8	5.3	7.5	256
Owner–mgrs of incorp. enterp.	n.a.	18.0	1.3	16.7	591
Owner–mgrs of unincorp. enterp.	n.a.	49.3	3.8	45.5	1 123
All employed persons	74.7	10.1	2.6	7.5	8 396

n.a. not applicable

^aThe category 'Employees' includes employees with leave entitlements and self-identified casuals. ^bThe percentages in each row do not sum to 100 because data for owner–managers who are not self-employed contractors and persons from the FOES category 'other employed persons' are not included in the table.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Gender and age characteristics

Self-employed contractors are much more likely than employees to be male. While 53 per cent of employees are male, the percentage of self-employed contractors that is male is 70.7 (table 5.3). This is not markedly higher than the 65 per cent reported by VandenHeuvel and Wooden (1995a).

It is interesting to note that, while dependent contractors are quite similar to employees on many characteristics (a function of the fact that employees make up three-quarters of the dependent contractor group), they are considerably more likely to be male. And independent contractors are more likely than dependent contractors to be male.

Looking at employees of each gender, a considerably higher percentage of men than women work as self-employed contractors — 12.6 per cent versus 6.7 per cent (table 5.4). But this difference reflects a large gender gap in independent contracting. The proportions of men and women working in dependent contracting are reasonably close — 2.9 versus 2.1 per cent. The gender gap for self-employed contractors is much larger than the 8.6 per cent of men, and 6.1 per cent of women

reported by VandenHeuvel and Wooden (1995a). It is unclear why the two sets of results differ as much as they do.

Table 5.3 Percentage distribution of employees and self-employed contractors by gender and age characteristics, August 1998^a

	<i>Type of employment</i>			
	<i>Employees</i>	<i>Self-employed contractors</i>		
		<i>All</i>	<i>Dependent</i>	<i>Independ.</i>
Gender and age characteristics	%	%	%	%
Male	53.0	70.7	63.9	73.0
Female	47.0	29.3	36.1	27.0
Aged				
15–24	21.7	7.5	17.7	4.0
25–34	27.0	22.8	27.5	21.3
35–44	24.5	28.9	26.6	29.6
45–54	19.7	25.0	18.2	27.3
55 and over	7.1	15.8	10.0	17.8

^aThe category 'Employee' includes employees and self-identified casuals.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Self-employed contractors tend to be older than employees. For example, 40.8 per cent of self-employed contractors are aged over 45, in contrast with 26.8 per cent of employees (table 5.3). These results are close to those reported by VandenHeuvel and Wooden (1995a).

It is apparent that the proportion of employed persons working as self-employed contractors increases with age. For example, only 4.2 per cent of employed persons aged 15–24 work as self-employed contractors in contrast with 16.5 per cent of those aged 55 and over (table 5.4). It is interesting to note that the proportion of employed persons working as dependent contractors does not vary much with age. At any age group, between 2 and 3 per cent of employed persons work as dependent contractors. The pattern of an increase in the proportion of older persons working as self-employed contractors is therefore driven by those working as independent contractors.

Table 5.4 Percentage of persons with different gender and age characteristics working as employees or self-employed contractors, August 1998^{a,b}

	<i>Type of employment</i>				<i>No. of employed persons</i>
	<i>Employees</i>	<i>Self-employed contractors</i>			
		<i>All</i>	<i>Depend.</i>	<i>Independ.</i>	
Gender and age characteristics	%	%	%		'000
Male	70.2	12.6	2.9	9.7	4 744
Female	80.7	6.7	2.1	4.6	3 652
Aged					
15–24	90.4	4.2	2.5	1.7	1 507
25–34	79.9	9.1	2.8	6.3	2 118
35–44	71.5	11.4	2.7	8.7	2 153
45–54	68.3	11.7	2.2	9.5	1 810
55 and over	55.0	16.5	2.7	13.8	808

^aThe category 'Employee' includes employees and self-identified casuals. ^bThe percentages in each row do not sum to 100 because data for owner-managers who are not self-employed contractors and persons from the FOES category 'other employed persons' are not included in the table.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Other demographic characteristics

Self-employed contractors are more likely to be married and have dependants than are employees (table 5.5). This is probably a reflection of the fact that self-employed contractors tend to be older than employees, and not an indication of a greater preference for marriage and children on the part of contractors.

There is little difference, however, between dependent contractors and employees in terms of proportions married or with dependants. This is not surprising given that 70.4 per cent of dependent contractors are classified as employees in the standard employment data (table 5.1). But this emphasises the similarities between employees and dependent contractors, and the differences between employees and independent contractors.

The percentage of married persons who work as self-employed contractors (11.5 per cent) (table 5.6) is slightly higher than the percentage of all persons working as self-employed contractors (10.1 per cent, from table 4.1). This means that employed persons who are married are slightly more likely to be self-employed contractors than those who are not married. But again, this is probably a reflection of the fact that older people are both more likely to be self-employed contractors and to be married. Similarly, married persons are more likely to be independent contractors

than unmarried persons, and married persons are less likely to be working as dependent contractors than the unmarried.

A slightly higher percentage of self-employed contractors (15 per cent) than employees (12.9 per cent) come from a non-English speaking background (NESB) (table 5.5). But again, this result may be a reflection of the fact that NESB immigrants tend to be older than Australian-born employed persons who make up the majority of the workforce (ABS Cat. no. 6359.0). Among NESB employed persons, 11 per cent work as self-employed contractors. This is slightly higher than the percentage of all employed persons working as self-employed contractors (10.1 per cent, from table 4.1), and this indicates that NESB persons are slightly more likely than other employed persons to be self-employed contractors (table 5.6).

Table 5.5 Percentage distribution of employees and self-employed contractors by other demographic characteristics, August 1998^a

	<i>Type of employment</i>			
	<i>Employees</i>	<i>Self-employed contractors</i>		
		<i>All</i>	<i>Dependent</i>	<i>Independ.</i>
Demographic characteristics	%	%	%	%
Married	58.8	71.8	55.5	77.4
With dependants	35.5	42.3	35.9	44.5
Non-English speaking background migrant	12.9	15.0	14.5	15.2
State				
New South Wales	33.3	35.4	40.2	33.8
Victoria	25.6	23.4	21.4	24.1
Queensland	18.4	18.7	20.2	18.2
South Australia	7.7	7.0	5.8	7.4
Western Australia	9.8	11.2	9.0	11.9
Tasmania	2.2	2.1	1.6*	2.3
Northern Territory	0.9	0.7	0.5*	0.8
Australian Capital Territory	2.1	1.4	1.3*	1.5
Worked outside State capital city	33.7	40.6	46.6	38.5

^aThe category 'Employee' includes employees and self-identified casuals.

* Indicates that the relative standard errors on these estimates are larger than 25 per cent. This means that these estimates are imprecise. In relative terms, the real proportions of employed persons with these characteristics may be considerably higher or lower than the estimates presented suggest.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

The distribution of self-employed contractors by State is very similar to the distribution of employees (table 5.5). Almost 60 per cent of both groups of employed persons work in New South Wales and Victoria. In other words, self-employed contractors are not disproportionately employed in any State — the distribution of self-employed contractors reflects the distribution of all employed

persons. Again, these results are similar to those reported by VandenHeuvel and Wooden (1995a).

However, the difference between the proportions of dependent and independent contractors in New South Wales is statistically significant (but none of the other State differences are). In other words, dependent contractors are disproportionately located in New South Wales.

Table 5.6 Percentage of persons with different demographic characteristics working as employees or self-employed contractors, August 1998^{a,b}

	<i>Type of employment</i>				<i>No. of employed persons</i>
	<i>Employees</i>	<i>Self-employed contractors</i>			
		<i>All</i>	<i>Depend.</i>	<i>Independ.</i>	
Demographic characteristics	%	%	%		'000
Married	69.4	11.5	2.3	9.2	5 310
With dependants	77.8	9.4	2.7	6.7	3 192
Non-English speaking background migrant	70.9	11.0	2.7	8.3	1 146
State					
New South Wales	74.9	10.7	3.1	7.6	2 790
Victoria	75.3	9.3	2.2	7.1	2 131
Queensland	74.0	10.1	2.8	7.3	1 559
South Australia	76.0	9.3	2.0	7.3	636
Western Australia	71.9	11.0	2.3	8.7	859
Tasmania	73.8	9.5	1.9*	7.6	189
Northern Territory	78.3	8.2	1.3*	6.9	76
Australian Capital Territory	82.4	7.8	1.8*	6.0	157
Worked outside State capital city	69.6	11.3	3.3	8.0	3 084

^aThe category 'Employee' includes employees and self-identified casuals. ^bThe percentages in each row do not sum to 100 because data for owner-managers who are not self-employed contractors and persons from the FOES category 'other employed persons' are not included in the table.

* Indicates that the relative standard errors on these estimates are larger than 25 per cent. This means that these estimates are imprecise. In relative terms, the real proportions of employed persons with these characteristics may be considerably higher or lower than the estimates presented suggest.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

It is unclear why this is the case. One possibility is that employment in industries in which dependent contracting is relatively high (Property and business services, Construction and Retail trade (table 5.7)) is also relatively high in New South Wales, but this is not the case. An alternative possibility is that employment outside the State capital city is higher in New South Wales. A higher proportion of self-employed contractors than employees work outside their State capital city (table 5.5). But a higher proportion of persons work outside their State capital city

in Queensland and Tasmania than in New South Wales, so this is not an explanation for the relatively high proportion of dependent contractors in New South Wales.

Nor is it clear why such a relatively high percentage of self-employed contractors generally, and dependent contractors in particular (46.6 in comparison with 33.7 per cent of employees, for example) work outside their State capital city.

There are small differences in the percentages of employed persons in each State that are engaged as self-employed contractors. For example, 7.8 per cent of employed persons in the ACT work in this way in comparison with 10.7 per cent in New South Wales and 11 per cent in Western Australia (table 5.6). This suggests that contracting is relatively more common in the New South Wales and Western Australian labour markets.

Looking at independent and dependent contractors, independent contractors are relatively most common in Western Australia (8.7 per cent of employed persons), and dependent contractors are relatively most common in New South Wales (3.1 per cent).

Occupation and industry

The distribution of self-employed contractors by occupation reveals the occupational diversity of this employment type. Self-employed contractors are found in every occupation type, although 27 per cent work as Tradespersons and related workers and a further 18.3 per cent work as Professionals (table 5.7).³

Relative to employees, self-employed contractors are more likely to be employed in higher-skilled occupations.⁴ About 65 per cent work in these occupations, in comparison with 48 per cent of employees (table 5.7).

Reflecting their relative concentration in skilled occupations, self-employed contractors are considerably more likely than employees to work as Tradespersons and related workers, and considerably less likely to work as intermediate or elementary clerical, sales and services workers (table 5.7). Twenty-seven per cent of self-employed contractors work as Tradespersons and in related occupations, in comparison with 11.9 per cent of employees. On the other hand, only 13.8 per cent

³ VandenHeuvel and Wooden (1995a) reported that 20 per cent of self-employed contractors worked as Tradespersons and 17 per cent as Professionals in May 1994. Other categories, where comparable, are also similar.

⁴ Higher-skilled occupations are defined as ASCO categories 1 through 5 — Managers and administrators, Professionals, Associate professionals, Tradespersons and related workers and Advanced clerical and service workers.

of self-employed contractors work as intermediate or elementary clerical, sales and services workers, in comparison with 31.7 per cent of employees. Self-employed contractors are also more likely to be Managers and administrators (8.2 per cent versus 4.2 per cent).

A much higher percentage of independent (72 per cent) than dependent contractors (46 per cent) work in higher-skilled occupations. The occupational distribution of dependent contractors is more like that of employees, than it is independent contractors. However, a higher percentage of dependent contractors than employees work as Tradespersons (14.5 versus 11.9 per cent), Intermediate production and transport workers (13.8 versus 9.6 per cent) and Labourers and related workers (14.4 versus 10.6 per cent).

Looking at workers within different occupational groups, Tradespersons are disproportionately employed as self-employed contractors (table 5.8). Almost 20 per cent of Tradespersons work as self-employed contractors. Given that 10.1 per cent of all employed persons work as self-employed contractors this means that Tradespersons are much more likely to be self-employed contractors than are employed persons from other occupational groups. Associate professionals, and Intermediate and Elementary clerical, sales and services workers are much less likely to be self-employed contractors than are persons from other occupational groups.

Similar statements could be made about independent contractors, with the additional observation that 10.2 per cent of Managers and administrators work in this way. Labourers and Intermediate production and transport workers are disproportionately employed as dependent contractors. Whereas 2.6 per cent of employed persons are dependent contractors, 3.8 per cent of employed persons in each of these occupations are classified as such. And a smaller than average percentage of Managers and administrators, Associate professionals and Advanced clerical and service workers (higher-skilled occupations) are employed as dependent contractors.

Table 5.7 Percentage distribution of employees and self-employed contractors by occupation and industry, August 1998^a

	<i>Type of employment</i>			
	<i>Employees</i>	<i>Self-employed contractors</i>		
		<i>All</i>	<i>Dependent</i>	<i>Independ.</i>
	%	%	%	%
Occupation				
Managers and administrators	4.2	8.2	3.3	9.9
Professionals	18.9	18.3	17.6	18.5
Associate professionals	9.0	7.0	7.3	6.9
Tradespersons and related workers	11.9	27.0	14.5	31.2
Advanced clerical and service workers	4.2	4.7	2.8	5.3
Interm. clerical, sales and services	19.7	9.8	17.6	7.1
Interm. production and transport	9.6	10.6	13.8	9.4
Element. clerical, sales and services	12.0	4.0	8.8	2.3
Labourers and related workers	10.6	10.6	14.4	9.3
Industry				
Agriculture, forestry and fishing	1.9	6.3	4.1	7.1
Mining	1.1	0.6	1.5*	0.3*
Manufacturing	14.7	8.6	9.3	8.4
Electricity, gas and water	1.0	0.3	1.1*	
Construction	4.2	24.7	11.7	29.1
Wholesale trade	6.4	3.3	4.8	2.8
Retail trade	14.8	8.6	10.9	7.8
Accomm., cafes and restaurants	5.1	1.8	5.4	0.5*
Transport and storage	4.3	5.4	6.8	4.9
Communication services	2.0	2.3	4.3	1.7
Finance and insurance	4.5	1.0	2.8	0.4*
Property and business services	9.3	19.7	12.1	22.3
Government admin. and defence	5.0	0.9	3.0	0.2*
Education	8.7	2.8	5.7	1.8
Health and community services	11.2	5.3	9.4	3.8
Cultural and recreational services	2.2	2.8	2.5	3.0
Personal and other services	3.6	5.7	4.7	6.0

^aThe category 'Employee' includes employees and self-identified casuals.

* Indicates that the relative standard errors on these estimates are larger than 25 per cent. This means that these estimates are imprecise. In relative terms, the real proportions of employed persons with these characteristics may be considerably higher or lower than the estimates presented suggest.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Table 5.8 Percentage of persons from different occupations and industries working as employees or self-employed contractors, August 1998^{a,b}

	Type of employment				No. of employed persons '000
	Employees	Self-employed contractors			
		All	Depend.	Independ.	
	%		%	%	
Occupation					
Managers and administrators	43.6	11.6	1.2	10.4	598
Professionals	78.0	10.2	2.5	7.7	1 520
Associate professionals	65.3	6.8	1.8	5.0	868
Tradespers. and related workers	64.9	19.8	2.7	17.1	1 147
Advanc'd cleric. and serv workers	68.1	10.3	1.6	8.7	383
Interm. cleric., sales and services	86.2	5.7	2.6	3.1	1 432
Interm. production and transport	77.7	11.4	3.8	7.6	779
Element. cleric., sales and servs	89.3	3.9	2.2	1.7	842
Labourers and related workers	80.5	10.9	3.8	7.1	825
Industry					
Agriculture, forestry and fishing	31.8	14.5	2.4	12.1	367
Mining	87.3	6.6	4.1*	2.5*	77
Manufacturing	83.3	6.6	1.8	4.8	1 105
Electricity, gas and water	95.2	3.4	3.4*	0	68
Construction	42.8	33.7	4.1	29.6	617
Wholesale trade	80.5	5.6	2.1	3.5	497
Retail trade	76.2	5.9	1.9	4.0	1 219
Accomm., cafes and restaurants	80.9	3.7	2.9	0.8*	393
Transport and storage	72.2	12.1	3.9	8.2	373
Communication services	81.5	12.8	6.0	6.8	153
Finance and insurance	88.0	2.7	1.9	0.8*	323
Property and business services	62.7	17.8	2.8	15.0	935
Government admin. and defence	95.4	2.3	2.0	0.3*	330
Education	91.2	4.0	2.1	1.9	600
Health and community services	86.4	5.5	2.5	3.0	814
Cultural and recreational services	72.1	12.3	2.7	9.6	194
Personal and other services	67.8	14.4	3.0	11.4	331

^aThe category 'Employee' includes employees and self-identified casuals. ^bThe percentages in each row do not sum to 100 because data for owner-managers who are not self-employed contractors and persons from the FOES category 'other employed persons' are not included in the table.

* Indicates that the relative standard errors on these estimates are larger than 25 per cent. This means that these estimates are imprecise. In relative terms, the real proportions of employed persons with these characteristics may be considerably higher or lower than the estimates presented suggest.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Self-employed contractors are much more concentrated by industry than are employees. Almost a quarter of self-employed contractors work in Construction and

a further 19.7 per cent are employed in Property and business services (table 5.7). Manufacturing and Retail trade account for a further 8.6 per cent each. But only 5.4 per cent of self-employed contractors work in Transport and storage. These figures are similar to those presented by VandenHeuvel and Wooden (1995a), with the exception of Transport and storage which they estimated accounted for 9.7 per cent of self-employed contractors.⁵ It is unclear why the FOES data deliver a different result from the data used by VandenHeuvel and Wooden.

The distribution of independent contractors by industry is similar to that of all self-employed contractors, except that a slightly higher proportion again work in Construction (29.1 per cent) and Property and business services (22.3 per cent). Dependent contractors are not as concentrated. About 12 per cent of dependent contractors work in each of Construction and Property and business services. And Manufacturing, Retail trade and Health and community services each account for around 10 per cent. In other words, the distribution of dependent contractors by industry is more diverse than that of independent contractors.

There is considerable variation in the composition of employment by type between industries (table 5.8). For example, 42.8 per cent of employed persons in Construction work as employees, and 33.7 per cent as self-employed contractors. This is in stark contrast to Government administration and defence where 95.4 per cent of the workforce are employees.

It is interesting to note that, although Cultural and recreational services and Personal and other services only account for 2.8 and 5.7 per cent respectively of self-employed contractors (table 5.7), over 12 per cent of employed persons in each industry work in this way (table 5.8). In other words, self-employed contracting is relatively common in these industries. Likewise, 12.1 per cent of persons employed in Transport and storage work as self-employed contractors.

Dependent contracting is most common in Communication services (table 5.8). Because employment in this sector is relatively small only a small proportion of dependent contractors are employed in the sector, but 6 per cent of employed persons in this industry are classified as dependent contractors. With around 4 per cent of their workforce classified as dependent contractors, it could also be said that dependent contracting is relatively common in Construction and Transport and storage.

⁵ VandenHeuvel and Wooden (1995a) report the share of Wholesale and Retail trade at 14 per cent. These industries together account for 12.2 per cent of contractors in this analysis.

Employment characteristics

A slightly lower percentage of self-employed contractors work full-time than do employees (70.9 versus 74.3 per cent) (table 5.9). And a slightly lower proportion again (68.7 per cent) of dependent contractors work full-time. The incidence of self-employed contractors employed on a full-time basis is 10 percentage points higher than the 61 per cent reported by VandenHeuvel and Wooden (1995a). This difference may be due to a difference in the way their data were collected, or may reflect an increase between 1994 and 1998 in the percentage of self-employed contractors that work full time.

Looking at full-time and part-time workers, a slightly higher proportion of part-timers work as self-employed contractors (table 5.10). The difference between the two groups is driven by dependent contractors — 4.3 per cent of part-time workers are dependent contractors in comparison with 2.4 per cent of full-time workers.

Table 5.9 **Percentage distribution of employees and self-employed contractors by employment characteristics, August 1998^a**

	<i>Type of employment</i>			
	<i>Employees</i>	<i>Self-employed contractors</i>		
		<i>All</i>	<i>Dependent</i>	<i>Independ.</i>
	%	%	%	%
Full time (in all jobs)	74.3	70.9	68.7	71.6
Preferred to work less hours	18.8	21.8	17.3	23.4
Preferred to work more hours	17.4	22.5	23.0	22.3
Received variable earnings	24.6	72.9	43.7	82.9

^aThe category 'Employee' includes employees and self-identified casuals.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

Self-employed contractors are more likely to desire a change in hours worked (44.3 per cent) than are employees (36.2 per cent) (table 5.9). Both dependent and independent contractors were disproportionately represented among people who wanted to work more hours. While together they account for 10.1 per cent of employed persons, they accounted for 13.3 per cent of persons who stated a preference to work more hours (table 5.10).

The majority of self-employed contractors (72.9 per cent) received earnings that varied from week to week, in comparison with a quarter of employees. Among self-employed contractors, dependent contractors were far more likely to be receiving regular earnings (table 5.9). And self-employed contractors accounted for

21.4 per cent of persons who received variable earnings (table 5.10). In other words, self-employed contractors are relatively much more likely than other employed persons to receive variable earnings.

Table 5.10 Percentage of persons with different employment characteristics working as employees or self-employed contractors, August 1998^{a,b}

	<i>Type of employment</i>				<i>No. of employed persons</i>
	<i>Employees</i>	<i>Self-employed contractors</i>			
		<i>All</i>	<i>Depend.</i>	<i>Independ.</i>	
	%		%	%	'000
Full time (in all jobs)	74.6	9.6	2.4	7.2	6 248
Part time (in all jobs)	75.1	11.4	4.3	7.1	
Preferred to work less hours	64.7	10.0	2.0	8.0	1 828
Preferred to work more hours	76.6	13.3	3.5	9.8	1 422
Received variable earnings	53.1	21.4	3.3	18.1	2 885

^aThe category 'Employee' includes employees and self-identified casuals. ^bThe percentages in each row do not sum to 100 because data for owner-managers who are not self-employed contractors and persons from the FOES category 'other employed persons' are not included in the table.

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

While it would be interesting to compare the earnings of different types of employed persons, detailed earnings information was not sought from owner-managers of unincorporated enterprises. The earnings of 67 per cent of self-employed contractors therefore were reported as 'could not be determined'.

Likewise, while it would be of interest to compare the total hours worked by different types of employed persons, hours information was only sought for a respondent's main job. Given that many self-employed contractors will have more than one client, their responses to this question will not reveal how many hours in total they worked, and are not comparable with those of persons who had only one job.

Summary

Relative to employees, self-employed contractors are more likely to be:⁶

- male;
- aged more than 45;
- married with dependant children;
- of non-English speaking background;
- working outside the State capital city;
- employed in higher-skilled occupations;
- concentrated in Construction and Property and business services;
- working part-time;
- dissatisfied with their working hours; and
- receiving earnings that vary from month to month.

Three quarters of dependent contractors are defined as employees in standard ABS labour force statistics. The characteristics of this group are therefore more like those of employees than are those of independent contractors. *Relative to independent contractors*, dependent contractors are more likely to be:⁷

- female;
- aged less than 35;
- unmarried and without dependents;
- working in New South Wales;
- located outside their State capital city;
- employed in lower-skilled occupations;
- working in Accommodation, cafes and restaurants, Communication services, Finance and insurance, Government administration, Health and community services, and not in Agriculture, forestry and fishing, Construction and Property and business services;
- working part-time;
- happy with their working hours;
- receiving an unvarying wage or salary.

⁶ Differences that are not commented upon are not statistically significant at the 95 per cent level.

⁷ Differences that are not commented upon are not statistically significant at the 95 per cent level.

5.2 Multivariate analysis of dependent versus independent contractors

The above analysis of the characteristics associated with employment as a dependent contractor looked at each characteristic in turn. Some characteristics may be strongly associated with each other, and when this association is taken into account the relationship of one or more of them with dependent contractor status might disappear.

For example, it was noted that dependent contractors were more likely than independent contractors to be aged less than 35, unmarried and without dependants. It is likely that people with one of these characteristics also have one or both of the others. It is not therefore not possible in a bivariate (or simple comparative) analysis to distinguish which of the variables is associated with dependent contractor status.

Multivariate analysis (a binomial logistic) was used to overcome this problem. This form of analysis permits, for example, an assessment of the impact of marital status on the likelihood that self-employed contractors are dependent, rather than independent, taking age and presence of dependants into account.

The results of this analysis are presented in appendix B. In summary they indicate that, other characteristics equal, self-employed contractors are more likely than employees to be:⁸

- male;
- relatively old;
- from a non-English speaking background;
- working in New South Wales or Western Australia and not in South Australia or the Northern Territory and the ACT;
- employed in a higher-skilled occupation;
- employed in Construction (and were less likely to be employed in all other industries except Property and business services, Finance and insurance, Cultural and recreation services and Personal services where the likelihood of employment is equal for self-employed contractors and employees). In other words, holding other characteristics constant, self-employed contractors are concentrated in the Construction industry;
- working part-time;
- wanting to work shorter hours; and

⁸ Differences that are not commented upon are not statistically significant at the 95 per cent level.

-
- receiving earnings that varied from month to month.

For dependent and independent contractors, the results indicate that, taking other characteristics into account, dependent contractors are more likely than independent contractors to be:⁹

- relatively young;
- unmarried;
- working in a State rather than the Northern Territory or the ACT;
- located outside their State capital city;
- employed in lower-skilled occupations;
- working in Property and business services (including Finance and insurance) Government administration, Health and community services or Other industries (defined to include Mining, Electricity, gas and water, Accommodation, cafes and restaurants and Communication services); and
- receiving an unvarying wage or salary.

⁹ Differences that are not commented upon are not statistically significant at the 95 per cent level.

6 Conclusions

Dependent contractors are of policy interest for at least two reasons. First, there are concerns that wage and salary earners are moving to contractual employment arrangements and reducing their tax liabilities, while the nature of their working arrangements is not changing. This phenomenon has implications for taxation revenue, and the degree of equity in the tax system. Second, there are concerns that employers can avoid obligations in areas like payroll tax, superannuation, unfair dismissal and workers' compensation if they hire workers as contractors. This phenomenon is seen as detrimental to worker welfare, and an indication that labour law is failing to protect a group of workers that, because they are essentially working in employee–employer type relationships, should be covered by that law.

This paper set out to answer five research questions related to self-employed contracting.

- What changes have occurred in the proportion of employed persons working as self-employed contractors (that is, employed persons without employees who supply services to clients on an explicit or implicit contract basis) over the past two decades?
- What proportion of employed persons work as self-employed contractors?
- What proportion of these contractors are dependent contractors (that is, employed on contractor–client terms but with work arrangements consistent with them being an employee)?
- What are the characteristics of self-employed contractors compared with employees?
- What are the characteristics of dependent compared with independent contractors (that is, persons working on contractor–client terms and with work arrangements consistent with them being a contractor)?

The following conclusions were reached.

First, time-series data specifically on self-employed contracting do not exist. However, standard ABS time-series data can be used to shed light on changes across time in self-employed contracting. This analysis reveals that the share of self-employed contractors among employed persons in Australia increased by at least 15 per cent over the two decades to 1998.

Second, in August 1998, self-employed contractors accounted for 10.1 per cent of all employed persons, or about 844 000 persons.

Third, in August 1998, around 25 per cent of self-employed contractors, or about 215 000 employed persons, were dependent. This translates into a dependent contractor share of total employment of 2.6 per cent.

Fourth, multivariate analysis indicated that, other characteristics equal, self-employed contractors were more likely than employees to be:

- male;
- relatively old;
- from a non-English speaking background;
- working in New South Wales or Western Australia and not in South Australia or the Northern Territory and the ACT;
- employed in a higher-skilled occupation;
- employed in Construction (and were less likely to be in to be employed in all other industries except Property and business services, Finance and insurance, Cultural and recreation services and Personal services where the likelihood of employment is equal for self-employed contractors and employees). In other words, holding other characteristics constant, self-employed contractors are concentrated in the Construction industry;
- working part-time;
- wanting to work shorter hours; and
- receiving earnings that varied from month to month.

Fifth, multivariate analysis was also used in a comparison of the characteristics of dependent and independent contractors. This revealed that, other things equal, relative to independent contractors dependent contractors were more likely to be:

- relatively young;
- unmarried;
- working in a State rather than the Northern Territory or the ACT;
- located outside their State capital city;
- employed in lower-skilled occupations;
- working in Government administration, Health and community services or Other industries (defined to include Mining, Electricity, gas and water, Accommodation, cafes and restaurants and Communication services) and not in Property and business services (including Finance and insurance); and

-
- receiving an unvarying wage or salary.

The analysis highlighted the extent of diversity in the employment groups. Self-employed contractors are employed in all occupational groups and industries. While self-employed contractors tend to be older than employees, there are self-employed contractors aged 15 to 24. Some are married, some are not. Some work full-time, some part-time. Likewise, it is not possible to say that all dependent or independent contractors are alike.

It would be interesting to look at some of the other characteristics of self-employed contractors, for example, the distributions of working hours and earnings. But that analysis requires the collection of more data.

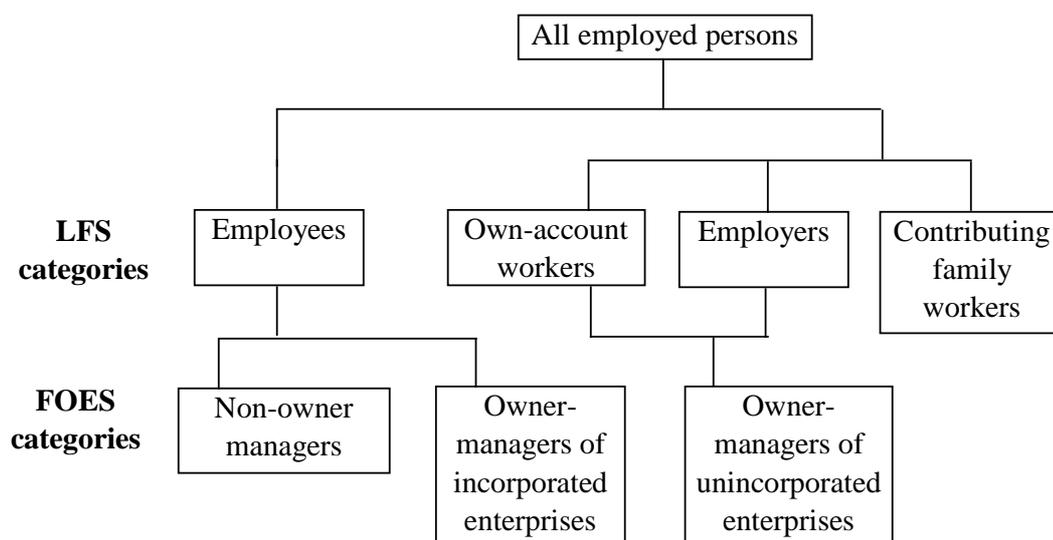
It is also clear that the definitions of self-employed contractors and dependent contractors are not straightforward. Further work could be undertaken on how workers are classified according to the nature of their employment.

Finally, if appropriate longitudinal data were available it would be of interest to study the characteristics of workers that change employment status across time.

A Employment types in ABS data

The ABS has published data from the *Labour Force Survey* (LFS) on the employment status of the Australian workforce in the February, May, August and November editions of the catalogue *Labour Force, Australia*, (ABS 6203.0) since February 1978. In these data, employed persons are classified as employees, own-account workers, employers and contributing family workers.

Figure A.1 Employment types in ABS data^a



^aLFS stands for Labour Force Survey

The category of employees can be decomposed into owner-managers of incorporated enterprises and non-owner employees. And the categories of employers and own-account workers together constitute owner-managers of unincorporated enterprises. Data on owner-managers is not reported in the LFS.

However, in the *Forms of Employment Survey* (FOES) (ABS Cat. No. 6359.0), the ABS does report data for owner-managers of incorporated and unincorporated enterprises. Furthermore, data are reported for three sub-groups of the employment category titled non-owner employees in figure A.1 — employees with leave entitlements, self-identified casuals and other employed persons. A description of

the type of employed persons in each employment category in the FOES is presented in table A.1.

Table A.1 Employment categories in the FOES

<i>Employment type</i>	<i>Definition</i>
Non-owner managers	
Employees with leave entitlements	Persons who (a) worked in someone else's business, or worked in their own unincorporated business, did not invoice clients for payment and paid PAYE tax, and (b) received paid holiday and sick leave.
Self-identified casuals	Persons who (a) worked in someone else's business, or worked in their own unincorporated business, did not invoice clients for payment and paid PAYE tax, (b) did not receive paid holiday and sick leave, and (c) considered their job to be casual.
Other employed persons	Persons who (a) worked in someone else's business, or worked in their own unincorporated business, did not invoice clients for own payment and paid PAYE tax, (b) did not receive paid holiday and sick leave, and (c) did not consider their job to be casual.
Owner managers	
Owner managers of incorporated enterprises	Persons who operated their own incorporated enterprise, including those who drew a wage or salary for their work in that enterprise.
Owner managers of unincorporated enterprises	Persons who operated their own unincorporated enterprise and either invoiced clients, or did not invoice clients and did not pay PAYE tax.

Source: ABS (*Forms of Employment*, Cat. no. 6359.0).

B Multivariate results

The multivariate results were generated using binomial logistic regressions (Long 1997). The coefficients reported are therefore odds ratios. The data were weighted according to the sample size (28 518).¹

A small number of observations for either dependent or independent contractors in some industries prompted the amalgamation of these industries with others. Communication services was combined with the larger Transport and storage; Finance and Insurance with Property and business services; Government administration and defence with Education; and Cultural and recreational services with Personal and other services. Mining, Electricity, gas and water and Accommodation, cafes and restaurants were combined into the category ‘Other industries’.

The odds ratios can be interpreted as the odds that either a self-employed or a dependent contractor has a certain characteristic, other characteristics equal. For example, males are 1.17 times more likely than females to be dependent contractors (table B.1). In other words, for every 1000 females working as dependent contractors there are 1 170 male dependent contractors (holding constant the workers’ other characteristics, for example, industry and occupation).

The inverse of 1.17, that is 0.85, reflects the odds of a male being an independent contractor, relative to females. In other words, for every 1000 females working as independent contractors, there are only 850 males. In sum, other characteristics equal, dependent contractors are more likely to be male than are independent contractors.

An alternative way of looking at this information is to say that, other things equal, 54 per cent of dependent contractors are male ($1170/2170 \times 100$), versus 46 per cent of independent contractors ($850/1850 \times 100$).

Comparison of self-employed contractors and employees

The multivariate results indicate that, as a group, self-employed contractors are statistically different from employees in a range of ways. Self-employed contractors are more likely to be male. Holding other characteristics equal, for every 1000

¹ Weights supplied by the ABS for the derivation of population representative estimates were scaled so that the observations summed to the sample size.

female self-employed contractors there are 1440 males. But there are only 690 male employees for every 1000 females.

Other characteristics equal, self-employed contractors are much more likely to be older than employees. For every 1000 self-employed contractors aged 15 to 24 there are 6792 aged 55 and over. In contrast, for every 1000 employees aged 15 to 24 there are only 147 aged 55 and over.

Likewise, other characteristics equal, self-employed contractors are more likely than employees to be from a non-English speaking background, and they are more likely to work in New South Wales and Western Australia, and less likely to work in South Australia and the Northern Territory and the ACT.

Self-employed contractors were also more likely, other things equal, to be working outside their state capital city than were employees.

Other things equal, self-employed contractors are considerably more likely than employees to work as Tradespersons, Managers and administrators and Professionals, and considerably less likely to work as Elementary clerical, sale and services workers, and Labourers.

For every 1000 self-employed contractors in Agriculture there are 2200 employed in Construction, in contrast with 450 employees in Construction for every 1000 in Agriculture. Self-employed contractors are less likely than employees to be employed in all other industries (except Property and business services, Finance and insurance, Cultural and recreation services and Personal services where the likelihood of employment is equal for self-employed contractors and employees). In other words, holding other characteristics constant, self-employed contractors are concentrated in the Construction industry.

Self-employed contractors are considerable less likely than employees to be working full-time, other characteristics equal. But they were more likely to desire a shorter working week. This perhaps suggests that some full-time self-employed contractors work very long hours.

Finally, self-employed contractors are much more likely than employees to receive variable earnings.

Comparison of dependent and independent contractors

Other characteristics constant, dependent contractors are significantly more likely (at the 90 per cent level) than independent contractors to be young. For every 1000 dependent contractors aged 15 to 24 there are only 242 aged 55 and over. In

contrast, for every 1000 independent contractors aged 15 to 24 there are 4130 aged 55 and over.

Holding other characteristics constant, dependent contractors are much less likely than independent contractors to be married. This is an interesting result. Given that dependent contractors tend to be younger than independent it is logical that they are less likely than independent contractors to be married. But marital status remains a point of difference even when age is taken into account.

In terms of distribution by State, the only difference between the two forms of contractors is that dependent contractors are much less likely than independent contractors to be working in the Northern Territory and the ACT.

The occupation information clearly indicates that, other characteristics equal, dependent contractors are more likely than independent to be working in a lower-skilled occupation (although the two types of contractor are equally likely to be employed as Associate professionals).

Relative to independent contractors, dependent contractors are more likely to be employed in service industries.

There is no difference between the two contractor types in likelihood of working full-time or preferences over working hours, other characteristics equal. But dependent contractors are much less likely than independent contractors to be receiving earnings that vary from month to month.

Table B.1 Logistic regression results

Dependent variable either equals 1 if self-employed and 0 if an employee, or 1 if dependent contractor, 0 if independent

	<i>Self-employed contractors v employees</i>		<i>Dependent versus independent contractors</i>	
	Odds ratio	P> Z	Odds ratio	P> Z
Male	1.4401	0.0000	1.1721	0.2620
Aged (15–24 omitted category)				
25–34	2.5912	0.0000	0.4517	0.0000
35–44	3.5206	0.0000	0.4308	0.0000
45–54	4.5729	0.0000	0.2779	0.0000
55 and over	6.7922	0.0000	0.2420	0.0000
Married	1.0865	0.2100	0.4774	0.0000
With dependants	1.0391	0.5290	0.9542	0.7520
Non-English speaking background migrant	1.2297	0.0060	1.2200	0.2190
State (Victoria omitted category)				
New South Wales	1.1511	0.0430	1.1870	0.2860
Queensland	0.9472	0.4780	1.0672	0.7120
South Australia	0.8586	0.0790	1.0215	0.9170
Western Australia	1.2385	0.0050	0.9196	0.6560
Tasmania	0.9271	0.4910	0.6777	0.1270
Northern Territory and ACT	0.6748	0.0010	0.4958	0.0170
Worked outside state capital city	1.3585	0.0000	1.3179	0.0360
Occupation (Labour's etc omitted category)				
Managers and administrators	2.5116	0.0000	0.2768	0.0000
Professionals	2.0953	0.0000	0.5506	0.0040
Associate professionals	1.2521	0.0770	0.7024	0.1480
Tradespersons and related workers	2.6619	0.0000	0.3313	0.0000
Advanced clerical and service workers	1.7494	0.0000	0.4691	0.0300
Interm. clerical, sales and services	1.0538	0.6420	1.3591	0.1640
Interm. production and transport	1.3362	0.0130	0.9900	0.9670
Element. clerical, sales and services	0.4889	0.0000	1.4302	0.2400
Industry (Agriculture etc omitted category)				
Manufacturing	0.3474	0.0000	1.3306	0.3610
Construction	2.2069	0.0000	0.7066	0.2410
Wholesale trade	0.3276	0.0000	1.6340	0.1860
Retail trade	0.5064	0.0000	1.1524	0.6460
Transp. and storage + Commun. servs	0.5876	0.0020	1.2181	0.5860
Prop. and bus. + Fin. and insurance servs	1.0441	0.7540	0.5968	0.0980
Gov't admin. and defence + Educ.	0.1781	0.0000	5.0613	0.0000
Health and community services	0.1919	0.0000	2.0799	0.0340
Cultural and rec. + Pers. services	0.8894	0.4390	0.6842	0.2470
Other industries	0.3274	0.0000	2.9479	0.0020
Full time	0.6631	0.0000	1.2306	0.1490
Preferred to work more hours	0.9215	0.2330	1.1154	0.4480
Preferred to work less hours	1.2168	0.0020	0.7799	0.1040
Received variable earnings	8.6961	0.0000	0.1837	0.0000

Source: Productivity Commission estimates derived from unpublished data from ABS Cat. no. 6359.0.

References

- ACIRRT 1999. *Australia at Work. Just Managing?*, Prentice Hall, Sydney.
- Australian Bureau of Statistics, various issues, *Labour Force, Australia*, Cat. no. 6203.0, ABS, Canberra.
- 2001, *Employment Arrangements and Superannuation*, Cat. no. 6361.0, ABS, Canberra.
- 2000, *Forms of Employment*, Cat. no. 6359.0, ABS, Canberra.
- 1997a, 'Trends in self employment', Feature article, *Labour Force, Australia*, Cat. no. 6203.0, January.
- 1997b, 'Owner managers of incorporated enterprises', Feature article, *Labour Force, Australia*, Cat. no. 6203.0, July.
- 1986, *A Guide to Labour Statistics*, Cat. no. 6102.0, ABS, Canberra.
- Bensen, J. 1991, 'Dual commitment: contract workers in Australian manufacturing enterprises', Working Paper 101, Department of Management and Industrial Relations, University of Melbourne.
- Bray, M. 1991, 'Unions and owner–drivers in New South Wales road transport' in M. Bray and V. Taylor (eds), *The Other Side of Flexibility*, ACIRRT Monograph 3, ACIRRT, University of Sydney, pp. 143–67.
- and Taylor, V. 1991, *The Other Side of Flexibility*, ACIRRT Monograph 3, ACIRRT, University of Sydney.
- Brooks, A. 1988, 'Myth and muddle: an examination of contracts for the performance of work', *University of New South Wales Law Journal*, 11(2) pp. 48–101.
- Brosnan, P. and Thornwaite, L. 1994. 'Atypical work in Australia: preliminary results from a Queensland study', in R. Callus and M. Schumacher (eds) *Current Research in Industrial Relations: Proceedings of the 8th AIRAANZ Conference*, Association of Industrial Relations Academics of Australia and New Zealand, Sydney.
- and Walsh, P. 1998. 'Employment security in Australia and New Zealand', *Labour and Industry*, 8(3), pp. 23–41.

Buchanan, J. forthcoming, 'Casuals and contractors', chapter 11 of a PhD thesis in progress at the University of Sydney.

— and Allan, C. 2000, 'The growth of contractors in the construction industry: implications for tax revenue', *The Economic and Labour Relations Review*, 11(1), pp 46–75.

Burgess, J. 1990, 'Non-employee status in Australia: trends and issues', *Australian Bulletin of Labour*, 16(4), pp. 233–53.

— and Strachan, G. 1999, 'The expansion of non-standard employment in Australia and the extension of employers' control', in A. Felstead and N. Jewson (eds), *Global Trends in Flexible Labour*, Macmillan Press Ltd, Hampshire.

Callus, R., Morehead, A., Cully, M. and Buchanan, J. 1991, *Industrial Relations at Work: the Australian Workplace Industrial Relations Survey*, AGPS, Canberra.

Campbell, I. and Brosnan, P. 1999, Labour Market Deregulation in Australia: the slow combustion approach to workplace change, *National Key Centre in Industrial Relations*, Working Paper no. 67, Monash University, Melbourne.

Campbell, I. and Burgess, J. 2001, 'A new estimate of casual employment', *Australian Bulletin of Labour*, 27(2), pp 85–108.

Creighton, B. 1994, 'The forgotten workers: employment security of casual employees and independent contractors', in R. McCallum, G. McCarry and P. Ronfeldt (eds), *Employment Security*, The Federation Press, Sydney.

Collins, H. 1990, 'Independent contractors and the challenge of vertical disintegration to employment protection laws', *Oxford Journal of Legal Studies*, 10(3), pp. 353–80.

Costello, P. 2000, *Alienation of Personal Services Income*, Press Release, 13 April 2000.

Creighton, B. and Stewart, A., 2000, *Labour Law: an introduction*, 3rd edition, The Federation Press, Sydney.

DEWRSB (Department of Employment, Workplace Relations and Small Business) 2000, *Casual Employment and Working Hours in Australia*, Ministerial Information Paper, Canberra.

Donohue, K., 'Owner-drivers and the dependency relationship in the road freight transport industry in Australia', *International Journal of Transport Economics*, Vol 18, No. 1, February 1991, pp. 55–84.

DWRSB (Department of Workplace Relations and Small Business) 1997, *The 1995 Australian Workplace Industrial Relations Survey (AWIRS 95): Matched Workplace Characteristics Questionnaire* [computer file], Data collected by

-
- Reark Research, Social Science Data Archives, The Australian National University [distributor], Canberra.
- Ellem, B. 1991, 'Outwork and unionism in the Australian clothing industry' in M. Bray and V. Taylor (eds), *The Other Side of Flexibility*, ACIRRT Monograph 3, ACIRRT, University of Sydney, pp. 93–114.
- Long, J. S. 1997, *Regression Models for Categorical and Limited Dependent Variables*, Sage Publications, London.
- Merritt, A. 1982, 'Control v. economic reality: defining the contract of employment', *Australian Business Law Review*, 9, 105–24.
- Morehead, A., Steele, M., Alexander, M. Stephen, K. and Duffin, L. 1997. *Changes at Work: the 1995 Australian Workplace Industrial Relations Survey*, Longman, Melbourne.
- Murtough, G. and Waite, M. 2000. *The Diversity of Casual Contract Employment*, Productivity Commission Staff Research Paper, AusInfo, Canberra.
- Nomchong, K. 1998, 'In defence of the right to fairness in work', Proceedings from *Industrial Relations Under the NSW System: emerging issues and challenges* Conference, Sydney, July 1998, and published as ACIRRT Working Paper 53.
- Probert, B. and Wajcman, J. 1991, 'Contracting out in the public sector: the case of computer services', in M. Bray and V. Taylor (eds), *The Other Side of Flexibility*, ACIRRT Monograph 3, ACIRRT, University of Sydney, pp. 168–89.
- Productivity Commission 1999, *Work Arrangements on Large Capital City Building Projects*, Labour Market Research Report, AusInfo, Canberra.
- Ralph, J. 1999, *Review of Business Taxation*, AusInfo, Canberra.
- Stewart, A. 1992, 'Atypical employment and the failure of labour law', *Australian Bulletin of Labour*, 18(3), 217–53.
- VandenHeuvel, A. and Wooden, M. 1994, *Self Employed Contractors: a review of evidence and research*, Working Paper 134, National Institute of Labour Studies, Flinders University, Adelaide.
- VandenHeuvel, A. and Wooden, M., 1995a, 'Self employed contractors in Australia: how many and who are they?', *Journal of Industrial Relations*, vol. 37, no. 2, pp. 263–80.
- VandenHeuvel, A. and Wooden, M., 1995b, *Self Employed Contractors in Australia: what are the facts?*, Working Paper 136, National Institute of Labour Studies, Flinders University, Adelaide.

-
- Underhill, E. 1991, 'Unions and contract workers in the New South Wales and Victorian building industries', in M. Bray and V. Taylor (eds), *The Other Side of Flexibility*, ACIRRT Monograph 3, ACIRRT, University of Sydney, pp. 115–42.
- , and Kelly, D. 1993. 'Eliminating traditional employment: trouble shooters available in the building and meat industries', *The Journal of Industrial Relations*, 38, pp 398–422.
- , Worland, D. and Fitzpatrick, M. 2000, 'Self-employment in the Victorian construction industry: working lives and employment practices', *Proceedings of the 14th AIRAANZ Conference*, Association of Industrial Relations Academics of Australia and New Zealand, Wellington, January–February 2000
[<http://www.management.ac.nz/depts/sml/airaanz/conferences.htm>]
- Wooden, M. 1999, 'Outsourcing and the use of contractors: evidence from AWIRS', *The Economic and Labour Relations Review*, 10(1) pp. 22–35.
- 1998. *The Changing Nature of Employment Arrangements*, Discussion Paper 5, The Transformation of Australian Industrial Relations Project, National Institute of Labour Studies, Flinders University, Adelaide.
- and VandenHeuvel, A. 1996. 'The use of contractors in Australian workplaces', *Labour Economics and Productivity*, 8(Oct.) pp. 163–94.