Research Report 1/2012

Award-reliant small businesses

Samantha Farmakis-Gamboni, David Rozenbes and Kelvin Yuen
Minimum Wages and Research Branch—Fair Work Australia

January 2012

The contents of this paper are the responsibility of the authors and the research has been conducted without the involvement of members of the Minimum Wage Panel of Fair Work Australia.

ISBN 978-0-9808491-8-9

This report was printed by D&D Digital Printing Pty Ltd, Carlton, Victoria.

All research undertaken by or commissioned by Fair Work Australia for the Annual Wage Review 2011–12 has been agreed by the Research Group. The Research Group comprises a Chair from the Minimum Wages and Research Branch of Fair Work Australia, and representatives nominated by:

- Australian Chamber of Commerce and Industry (ACCI);
- Australian Industry Group (Ai Group);
- Australian Council of Social Service (ACOSS);
- Australian Council of Trade Unions (ACTU);
- Australian Government; and
- State and Territory governments.

This paper, 'Award-reliant small businesses', is the work of Samantha Farmakis-Gamboni, David Rozenbes and Kelvin Yuen of the Minimum Wages and Research Branch, Fair Work Australia.

The authors are grateful for comments provided by Professor Elizabeth Webster, Melbourne Institute of Applied Economic and Social Research, University of Melbourne, and Dr Joshua Healy, National Institute of Labour Studies, Flinders University.

The authors would also like to thank Miranda Pointon, Karen Taylor, Troy Wheatley and Matthew Forbes for their comments.

A draft of this paper was workshopped with the Research Group prior to finalisation. The authors would also like to thank the Research Group for its comments.

The contents of this research paper, however, remain the responsibility of the authors, Samantha Farmakis-Gamboni, David Rozenbes and Kelvin Yuen.

This paper uses the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Survey was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views based on these data should not be attributed to either FaHCSIA or the Melbourne Institute.

Table of Contents

List of tables

List of figures

Abbreviations list

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
AFPC	Australian Fair Pay Commission
AIRC	Australian Industrial Relations Commission
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
APCS	Australian Pay and Classification Scales
BLD	Business Longitudinal Database
BLS	Business Longitudinal Survey
CURF	Confidentialised Unit Record File
DiD	Difference-in-Differences
EEH	Employee Earnings and Hours
EVAO	Estimated Value of Agricultural Operations
EWRERC	Employment, Workplace Relations and Education References Committee
FAME	Financial Analysis Made Easy
FMW	Federal Minimum Wage
FWA	Fair Work Australia
FTE	Full-time equivalent
HILDA	Household, Income and Labour Dynamics in Australia
LEED	Linked Employer-Employee Dataset
NMW	National Minimum Wage
OECD	Organisation of Economic Co-operation and Development
SME	Small and medium enterprise
UK	United Kingdom
US	United States

Executive summary

This report seeks to increase the understanding of the impact of award wage increases on small businesses in Australia by answering the following research questions:

- what are the characteristics and performance of small businesses that employ award-reliant workers and their employees; and
- what are the differences between small firms that employ award-reliant workers and small firms that do not employ award-reliant workers, particularly with respect to indicators of performance?

Literature review

Various descriptions of small businesses have been used in previous research, of which most use a maximum number of employees as their definition. There have been few recent studies on small businesses in Australia, with Evesson et al. (2011) the only research covering industrial relations legislation and small businesses since the conclusion of the *Workplace Relations Act 1996*. A number of studies found that small businesses have a greater reliance on awards than larger businesses and that some employers had difficulty understanding awards. However, awards were not found to inhibit flexibility as employers generally used discretion when deciding on labour strategies.

A number of United States (US) and United Kingdom (UK) papers have studied the effects of minimum wage increases on small businesses, with little consensus as to the effects. In addition, productivity and business failure rates were difficult to measure and, as a result, the findings were inconclusive. Higher rates of job losses in small firms were also found, with internal labour markets in large businesses leading to less job destruction.

The literature review reveals the limited amount of research into small businesses in Australia, particularly in recent times and with regard to the effects of award wage increases. International studies on minimum wage increases have tended to analyse small firms due to their greater likelihood of employing lower-waged workers. However, much of the international research has focused on the comparison between wages paid in small and large businesses.

Data sources

The key datasets that can be used to analyse small businesses and their employees by their pay-setting arrangements are the Australian Bureau of Statistics (ABS) Business Longitudinal Database (BLD), the ABS Survey of Employee, Earnings and Hours (EEH) and the Household, Income and Labour Dynamics in Australia Survey (HILDA).

The BLD and the EEH are employer-based surveys, while HILDA is an employee survey. However, while the EEH is an employer-based survey, it focuses on the characteristics of employers and employees by pay-setting method, while the BLD highlights the characteristics of businesses. The HILDA survey contains data on the characteristics of employees by pay-setting method.

Data limitations for the analysis varied across the surveys. For the ABS surveys used in this report, the main limitations stemmed from the amount of data unavailable due to reasons of confidentiality:

- for the EEH survey, the analysis was limited by the exclusion of the industry variable from the 2006 EEH Confidentialised Unit Record File (CURF); although it was included in the 2010 EEH CURF at the expense of the state and sector variables; and

- for the BLD, the pay-setting variable is limited as it does not indicate the relative importance of awards in a particular business. The ABS also omitted the method of setting pay variable from its recent BLD release. There is a lack of financial and employment data in the BLD relative to its predecessor (the Business Longitudinal Survey), which means that sound quantitative measures of productivity and profitability cannot be constructed. As a consequence, qualitative measures are used for the analysis, which can be considered only as proxies for these variables.

The main concern with the HILDA analysis is the accuracy of the pay-setting variable, as it is a household survey and data are obtained from employees rather than employer payroll data. However, the analysis partly addresses this problem by excluding public sector employees, as significant differences between award reliance in HILDA and EEH are partially due to HILDA overestimating the award reliance of public sector employees.

Creating a Linked Employer-Employee Dataset (LEED) for Australia, which matches information collected from businesses with information from households, could allow for a better understanding of the relationship between minimum wages and employment, productivity, business competitiveness and viability in Australia.

General characteristics of small businesses in Australia

While around 90 per cent of employing businesses were small businesses, they accounted for only around one third of employees and one third of total operating profits before tax for employing businesses. Trends between 2002–03 and 2005–06 show that, while small businesses experienced the largest growth in industry value added, wages and profit growth per business was low relative to other employing businesses. Small businesses also experienced higher entry and exit rates and lower survival rates than their employing counterparts between June 2007 and June 2009.

Analysis of small businesses using the Business Longitudinal Database

Small award-reliant businesses accounted for 12.9 per cent of small employing businesses in 2005–06. Relative to small businesses that utilised non-award arrangements and a combination of award and non-award arrangements, small award-reliant businesses were less likely to exhibit increased productivity and profitability in the period of analysis. Small award-reliant businesses also experienced lower survival rates relative to their counterparts. The data also highlighted that the majority of businesses that used awards only tended to move towards using non-awards or a combination of both over time.

However, the subjective nature of the productivity, profitability and competition measures used in the BLD adds uncertainty to these findings and the direction of causality remains ambiguous, as these data highlight only associations between small award-reliant businesses and their performance.

Analysis of employees working in small businesses

Analysis of the EEH data on the characteristics of employees working within and across various worker types showed that the characteristics of employees working within small businesses were not unique. For example, the analysis showed that the occupation and industry profile of worker types was more likely to be associated with award reliance than firm size. However, in some cases, there was no relationship between the labour force characteristics and firm size or award reliance.

Award-reliant workers also received lower hourly wages. When separating workers based on pay-setting arrangement, workers in small firms received lower hourly wages on average than workers in larger firms.

Analysis of the HILDA data showed that award-reliant workers employed in small firms in 2008 (Wave 8) were the least likely to be employed in 2009 (Wave 9). Changes between full-time and part-time status were divided by award reliance, with award-reliant workers less likely to remain full-time, although part-time workers were more likely to move to full-time if employed in larger firms. As well, workers were more likely to remain or move to permanent or fixed-term employment if employed in a larger firm.

1. Introduction

The aim of this report is to consider the impact of award wage increases on small businesses. The research proposes to examine two questions:

- what are the characteristics and performance of small businesses that employ award-reliant workers and their employees; and
- what are the differences between small firms that employ award-reliant workers and small firms that do not employ award-reliant workers, particularly with respect to indicators of performance?

The research relates to section 284(1)(a) of the *Fair Work Act 2009* which says that:

'FWA must establish and maintain a safety net of fair minimum wages, taking into account:

(a) the performance and competitiveness of the national economy, including productivity, business competitiveness and viability, inflation and employment growth'.[1]

For the purposes of this paper, 'award-reliant businesses' are those with employees that are award-reliant only, meaning that their pay rate is set according to the relevant award rate specified for the classification of the employee and not set above that relevant award rate.

Various definitions of 'small business' have been used in previous research, both in Australia and internationally, and are discussed in detail in the literature review. For the purpose of statistical analysis, the project employs the definition of a small business as encompassing businesses that employ fewer than 20 employees.[2] This definition was adopted for this report as the available datasets, namely the Australian Bureau of Statistics (ABS) Business Longitudinal Database (BLD) and the ABS Survey of Employee, Earnings and Hours (EEH), define small businesses as having fewer than 20 employees. As a result, this definition was also chosen for analysis using the Household, Income and Labour Dynamics in Australia Survey (HILDA).

Healy et al. (2011) identified that while a small set of overseas studies employ workplace-level data to examine minimum wage issues, no studies examining the impact of award wage increases have been undertaken in Australia because of the 'absence of equivalents to the rich firm-level panel, and linked employer-employee datasets that are increasingly becoming available in other countries'.[3] In Chapter 3 of this report, a proposal for the creation of a Linked Employer-Employee Dataset (LEED) that would provide this information is discussed.

The lack of rich firm-level data prevents this report from isolating the impacts, if any, of award wage adjustments on small businesses. Instead, this report attempts to determine differences in the characteristics between small award-reliant firms and small non-award-reliant firms, as well as between small and larger firms, to assess if small award-reliant businesses are defined by a unique set of characteristics.

Ideally, the conclusions in this report would stem from analyses of firm-level data. As the availability of firm-level datasets is limited, this report also includes analyses of characteristics of workers employed by the firm types of interest. The weakness with employee surveys in this context is that they are not a substitute for firm-level data.

---

1 *Fair Work Act 2009*, s.284(1)(a).

2 Australian Bureau of Statistics, *Australian Industry, 2009–10*, Catalogue No. 8155.0, 2011; Farmakis-Gamboni S and Yuen K, *An overview of productivity, business competitiveness and viability,* Fair Work Australia Research Report 1/2011, January 2011.

3 Healy J, McDonald I, Macaitis K, Mavromaras K and Sloane P, *Research framework and data strategy,* Research report 4/2011, National Institute of Labour Studies, Flinders University, report commissioned by Fair Work Australia 2011, p. 18.

This report also aims to convey information on the characteristics of small businesses, thereby enabling others to draw upon the data presented.

The BLD, EEH and HILDA data sources are used in this report to explore the differences between small award-reliant businesses and other business types, such as small businesses that are not award-reliant, medium and large businesses that are not award-reliant and medium and large businesses that are award-reliant. The datasets were chosen because they each include a variable allowing the identification of either award-reliant businesses or employees. The BLD is the only survey covering firm performance that includes this variable and it identifies firms that are award-reliant only, not award-reliant, and firms that employ a combination of workers on awards and not on awards.

The EEH and HILDA surveys provide information on employees, and as such it is difficult to identify whether or not these employees work for a business that is solely award-reliant. Employees are separated into four worker types:

- award-reliant workers employed in small firms;
- non-award-reliant workers employed in small firms;
- award-reliant workers employed in larger firms; and
- non-award-reliant workers in larger firms.

For the purpose of analysis, and reflecting the available data, the definition of award-reliant businesses will include businesses that paid only award rates. While the BLD 2004–05, 2005–06 and 2006–07 Confidentialised Unit Record File (CURF) includes 'method of setting pay' it does not identify the proportion of employees covered by each method. If a business is covered by awards and another type of employment arrangement, it is unknown what proportions of employees are covered by awards. The three business categories defined in the BLD are:

- businesses strictly covered by awards are defined as 'award-reliant only';
- businesses that use a combination of awards and non-awards; and
- businesses that used non-award arrangements.

The EEH survey and the HILDA survey do not present firm-level data. In this instance, employees in receipt of an 'award only' are considered award-reliant and are examined in comparison to non-award-reliant employees.

The analysis of the EEH and HILDA data in Chapter 6 compares the composition *within* each worker type. For example, this is undertaken by presenting the tables showing the proportions of each occupation that comprise award-reliant workers in small firms, and a comparison is made with the proportions that the occupations comprise of award-reliant workers in larger firms and non-award-reliant workers in small firms. However, such analysis is affected by the proportions *across* each worker type. That is, Sales workers may comprise a relatively high proportion of award-reliant workers employed in small firms compared with other occupations, however this may be because a higher proportion of Sales workers are award-reliant and employed in small firms compared with the other worker types.

While around 90 per cent of employing businesses were classified as small businesses, only around one third of employees were employed in small businesses. Wages and profit growth were lower for small businesses compared with larger businesses, while small businesses had higher entry and exit rates. The BLD analysis found that small award-reliant only businesses were less likely to exhibit increased productivity and profitability and tended to move towards using non-awards or a combination of award and non-award arrangements.

The EEH and HILDA analysis of employee characteristics found that award-reliant employees were similar regardless of firm size. That is, award-reliant employees in small firms were more similar to award-reliant workers in larger firms rather than to non-award-reliant workers in small firms. A relatively higher proportion of award-reliant workers were female, part-time, casual and employed in occupations such as Sales workers and Community and personal service workers.

The report is divided into the following chapters. Chapter 2 is a review of the literature on small businesses. Chapter 3 addresses the data sources and data limitations. Chapter 4 provides general characteristics of small businesses over time. Using the ABS BLD, Chapter 5 presents an analysis of the characteristics and performance of small award-reliant and small non-award-reliant businesses over time. Chapter 6 looks at the characteristics of employees working within and across different worker types using data drawn from the ABS EEH CURF 2010 and the HILDA survey. This chapter also presents a longitudinal analysis of employee behaviour. Chapter 7 provides some concluding remarks.

2. Literature review

This chapter reviews the literature on small businesses, providing summaries on an extensive range of topics related to small businesses. Surveying international and domestic studies, the review found that there were a number of ways to define small business and they are not always defined according to the number of employees within a workplace. The review found that in most cases the definition adopted should accord to the needs of the research.

Australian studies on the effects of industrial relations on the performance of small firms were found to be limited, reflecting the absence of quality micro data on this issue. Since most domestic studies did not provide empirical evidence on the potential impact of minimum wage increases on small firms, the review incorporates international studies that examined these effects. These studies mainly stem from the United Kingdom (UK) and United States (US) and are somewhat contentious, presenting different responses to an increase in the minimum wage on small businesses using various methods. Nevertheless, they draw on evidence lacking in Australia, which should be discussed in the context of small businesses.

The literature review also looks at the effects of firm size on wage levels, and indicators of firm performance such as productivity, profitability and firm survival, employment dynamics and managerial structure. These variables were reviewed because firms' responses to minimum wages adjustments could encompass changes to one or more of these variables, and the impact could differ between small and larger firms. Indeed, some international studies suggested that differences in management structure was linked to firm size and higher rates of job loss were found in small firms. However, the findings on productivity and business failure rates were inconclusive.

This chapter is structured as follows. Section 2.1 examines the definition of small business. Section 2.2 reviews the literature on small businesses and industrial relations in an Australian context, while section 2.3 reviews the literature on minimum wages in an international context. Sections 2.4 to 2.6 focus on the relationship between firm size and wage levels, indicators of firm performance and employment dynamics. Section 2.7 concludes.

2.1 What is a small business?

Helfand et al. (2007) stated that there is no consensus among economists as to what constitutes a small business and that it depends on the scope of the research and the availability of data. Buultjens (2003) and Atkins and Lowe (1997) concurred that a high degree of uncertainty surrounds the definition of a small business across and within countries and acknowledged that this creates difficulties for comparison. Even developing a 'practical definition of business' is an 'ambiguous and abstract concept' that can have different meanings for different users (ABS 2005). Nevertheless, for statistical purposes, the ABS has defined a business within Australia to be:

> '[a] legal entity engaging in productive activity and/or other forms of economic activity in the market sector. Such entities accumulate assets on their own account and/or hold assets on behalf of others, and may incur liabilities. Excluded are the economic activities of individuals (except where individuals engage in productivity activity either as sole traders or in partnership) and entities mainly engaged in hobby activities.' (ABS 2005: 2).

The Small Business Fair Dismissal Code defines a small business as a business that employs fewer than 15 employees.[4] Under section 23(1) of the *Fair Work Act 2009*, a national system employer 'is a *small business employer* at a particular time if the employer employs fewer than 15 employees at that time.' The ABS defines a small business as a business that employs fewer than 20 persons and, in some instances, this definition may include non-employing businesses.

A business can be classified by a range of variables, such as number of employees, the industry it operates in, its legal structure and its institutional sector. ABS (2005) has used the following size classifications of businesses for statistical purposes:

- small employing businesses—businesses employing fewer than 20 persons and includes:
    - micro employing businesses—businesses employing fewer than five persons; and
    - other employing small businesses—businesses employing five to fewer than 20 persons.
- medium employing businesses—businesses employing 20 to fewer than 200 persons; and
- large employing businesses—businesses employing 200 or more persons.

These size classifications are generally not applicable to agricultural businesses, due to factors such as seasonality and the extensive use of contract labour. For these businesses, firm size is based on an estimation of the value of agricultural activity undertaken. In addition, other non-standard sizing classifications based on turnover or asset holdings can also be applied, particularly if employment data are not available (ABS 2005).

Various Australian studies have adopted the ABS definition for small employing businesses. For example, Buultjens (2003) and Juniper et al. (2004) used the definition of fewer than 20 employees in the service industries and fewer than 100 employees in Manufacturing.[5] In conducting an inquiry into the factors that determine employment in small businesses, the Senate Employment, Workplace Relations and Education References Committee (EWRERC) (2003) adopted a similar approach of defining a small business by focusing on a private sector business outside of agriculture with fewer than 20 employees or a private sector business in agriculture with an Estimated Value of Agricultural Operations (EVAO) of between $22 500 and $400 000. These measures were designed to capture the management and ownership structure of small businesses, which is typically based on close control of the owners who also contribute most or all of the operating capital.

Forsaith et al. (1994) studied the interchangeability of definitions of a small enterprise using data drawn from the 1991–92 ABS Economic Activity Survey.[6] They stated that quantitative variables, such as employment, turnover and assets are frequently used to define businesses by size and commented that a definition for small business should vary according to industry. For example, they noted that a petroleum plant would be defined as large with respect to its asset base, but small with regard to its number of employees. As a result, the paper concluded that quantitative definitions of small enterprises should be sector specific and that the appropriateness of alternative size definitions should be considered in the context of the sample of enterprises used for research. Revesz and Lattimore (1997) noted that small firms are not homogenous, that they can be found in different types of industries, and provide both skilled and unskilled jobs.

4 Small Business Fair Dismissal Code, *Fair Work Act 2009*.
5 The ABS *Small Business in Australia* publications for 1995 and 1997 had separate definitions for the Manufacturing and non-Manufacturing sectors which were revised in 1999.
6 The Economic Activity Survey provides data for ABS surveys such as *Australian Industry*, Catalogue No. 8155.0.

Atkins and Lowe (1997) included managerial processes as a defining characteristic of small businesses and stated that some firms with small numbers of employees may adopt sophisticated managerial practices that mimic larger firms. Using data on managed shopping centres, Watson and Everett (1999) defined a small business to be 'a business in which one or two persons are required to make all the critical management decisions: finance, accounting, personnel, purchasing, processing or servicing, marketing, selling, without the aid of internal specialists and with specific knowledge in only one or two functional areas' (Watson & Everett 1999: 3).

Decision-making with regards to labour strategies in small businesses is often done solely by the owner-manager. For example, Evesson et al. (2011), in a qualitative study of 20 enterprises, found that small firms were operated by the owner-manager, while larger firms had tiers of managers. Owner-managers in small firms were found to generally have less knowledge of labour management issues.

The relationship between employers and employees also varies with firm size as there is likely to be more direct communication between employers and employees in small firms (Buultjens 2003) and it is usually less formal (EWRERC 2003).

Definitions in other Organisation for Economic Co-operation and Development (OECD) countries of small firms varied on the basis of the maximum number of employees employed by the firm, however they were generally based on a firm being independent and a non-subsidiary, and also on the basis of a maximum value of financial assets (EWRERC 2003).

Revesz and Lattimore (1997) followed the OECD definition of small business, where firms with fewer than 100 employees were classified as small and those with fewer than 20 employees were micro or very small businesses. Among the UK and European literature, Gilman et al. (2002) studied firms with between 10 and 49 employees at the establishment level, but also added a small number of firms where the overall size of the whole firm was below 50. Agell (2004) looked at wages at the establishment level, as managers at the 'head office' would know less about pay at the local level.

North American studies have also used various definitions based on number of employees. Some studies have used fewer than 1000 employees (Hettler 2007); fewer than 500 employees (US Small Business Administration); 100 or fewer employees (Sabia 2006); fewer than 50 workers (Fiscal Policy Institute 2004); fewer than 25 employees (Evans and Leighton 1988); and some fewer than 20 employees (Morrissette 1993). Helfand et al. (2007) also discussed the distinction between an establishment and a firm. They defined an establishment usually at a single location and engaging in one or predominantly one activity, and a firm consisting of one or more establishments (Helfand et al. 2007: 40–41). Other studies have also noted this distinction, with firm size found to be statistically weaker than establishment size when studying wage differences (Brown and Medoff 1999).

This research report will adopt the definition of small business and size classifications as defined by the ABS. While this report distinguishes between small and larger businesses by the number of employees, studies reviewed in this section showed that there is no universal definition of small business. The definition of a small business appeared to vary by country and sector of analysis and is largely influenced by the research undertaken.

2.2 Small businesses and industrial relations in an Australian context

Over the past two decades, industrial relations have been governed by different pieces of legislation; namely the *Workplace Relations Act 1996*, the *Workplace Relations Amendment (Work Choices) Act 2005* and the *Fair Work Act 2009*. As a result, the literature surveyed in this section captures the performance of small businesses operating during different periods of legislation. This section canvasses literature relating to: the awards system, the safety net, various aspects of flexibility, and unionisation, and their impact on small businesses.

The following table provides a summary of the adjustments to minimum and award wages over the period covered in this report. Over the period, three separate bodies were responsible for the setting of minimum and award wages: the Australian Industrial Relations Commission (AIRC) (until 2005); the Australian Fair Pay Commission (AFPC) (2006–2009) and the Minimum Wage Panel of Fair Work Australia (2010 onwards).

Table 2.1: Adjustments to award wages and the Federal/National Minimum Wage, 2002–2011

Tribunal	Year	C14/FMW/ NMW	Increase awarded
AIRC	2002	$431.40	$18 per week (4.4% for C14)
AIRC	2003	$448.40	$17 per week (3.9% for C14)
AIRC	2004	$467.40	$19 per week (4.2% for C14)
AIRC	2005	$484.40	$17 per week (3.6% for C14)
AFPC	2006	$511.86	$27.36 per week to the FMW (5.6%) and all adult Pay Scales up to and including $700 per week $22.04 per week in all adult Pay Scales above $700 per week
AFPC	2007	$522.12	$10.26 per week to the FMW (2.0%) Approximately $10.25 to all adult Pay Scales up to and including $700 per week $5.30 per week in all adult Pay Scales above $700 per week
AFPC	2008	$543.78	$21.66 per week to the FMW (4.1%) and all Pay Scales
AFPC	2009	$543.78	No increase
FWA	2010	$569.90	$26 per week (4.8% for FMW)
FWA	2011	$589.30	3.4% per week

Note: The FMW was increased by 10 cents in 2005. C14—represents the minimum wage for the C14 classification level in the Metal, Engineering and Associated Industries Awards 1998 (the Metal Industries Award); FMW—the AFPC adjusted the Federal Minimum Wage and NMW—Fair Work Australia adjusts the National Minimum Wage.

Source: Fair Work Australia, http://www.fwa.gov.au

According to Buultjens (2003), there has been little research into small businesses in Australia due to the presumption that they have minimal impact on employment and income, low levels of union membership, low incidence of strike activity and because they have little input into the formation of industrial relations policy and awards.

The awards system is unique to the Australian industrial relations landscape, as it is defined by industry and occupation specific minimum rates of pay and a national minimum wage. EWRERC (2003) noted that small firms have a greater reliance on awards for setting terms and conditions of employment, while Buultjens (2003) found that managers of small and large businesses held similar perceptions about the likely impact of awards.

In regards to the transition to modern awards, a qualitative study of 20 enterprises commissioned by Fair Work Australia (Evesson et al. 2011) found that small retail business owners had no knowledge of the transition or the content of the awards, with the decision of the Annual Wage Review 2009–10 adding to confusion as it was undertaken around the same time. The research also found that medium and small retail and hospitality businesses anticipated a significant impact on their business operations from the Annual Wage Review 2009–10; however, findings presented in their last phase of research found that most believed the impact had been slight, which was evidenced by the nature of the adjustments made by employers.

Harding and Harding (2004b) examined the extent to which Safety Net adjustments impacted on small and medium sized Australian businesses. They designed a questionnaire to be included in the October/November 2003 Yellow Pages survey of 1800 businesses. They found that the May 2003 Safety Net adjustment, via its effect on labour demand, cost about 14 000 jobs in the three months prior to the survey. By acknowledging that the short run does not take into account changes made to business operations, such as production technology and capital stock, Harding and Harding also conducted some medium to long term modelling by estimating the counterfactual—how much employment would have changed if there was no increase. Their analysis found that not adjusting the Safety Net over a five-year period would result in an increase in employment demand of 245 000 jobs. In their survey of minimum wages and employment, Neumark and Wascher (2007) commented on the paper, noting that employers' responses regarding employment changes to minimum wage increases should be interpreted with caution.

Some research has found that small business employers were satisfied with the award system because it did not appear to inhibit wage flexibility[7] (Buultjens 2003). Buultjens and Orme (2002) stated that it was reasonable to assume that wage flexibility was a greater problem for small firms as labour costs comprised a higher proportion of total costs. He also claimed that there was a significant level of flexibility for small businesses due to informal relations and decision-making, as well as a lack of union membership among employees. Buultjens (2002) noted that the aim of deregulation was to allow market forces to determine wages and conditions through enterprise and individual bargaining and give more autonomy to small businesses. However, he argued that this was based on ideology and not reality, since small businesses had not been pursuing formalised enterprise and individual bargaining.

Based on a study undertaken to investigate the effect of the *NSW Industrial Relations Act 1991* on a sample of business enterprises drawn from the North Coast region of New South Wales, Buultjens (1994) reported on areas of flexibility small businesses valued and whether awards and trade unions had an affect on these areas of flexibility that small businesses had hoped to achieve. The flexibility variables considered were: ability to hire and fire to suit economic conditions; ability to adjust working hours; ability to extend range of tasks performed by employees; ability to alter wages to suit economic conditions; and ability to consult and negotiate directly with employees on wages and conditions.

Buultjens found that the most important of the flexibility variables considered by employers in the survey were the ability to extend the range of employee tasks and the ability to adjust working hours. These were followed by the ability to hire and fire. The least important of the flexibility variables in the survey was the ability to alter wages to suit economic conditions. In effect, the paper found that small businesses attained flexibility within the award system by adjusting working hours and extending tasks found to be least affected by awards. The study also found that awards allowed a substantial amount of negotiation at the enterprise level.

However, Buultjens argued that the reluctance of small firms to enter into enterprise bargaining could be due to extra legal costs, the fact that it would involve a third party, and give employees access to legal recourse. The study also found that many employees of small businesses were not members of unions and many very small firms were not members of employers' associations.

7 Flexibility, in a labour market context, is a broad and ambiguous term and varies when either discussing employers or employees (Farmakis-Gamboni and Yuen 2011). For example, Atkinson (1984) identifies four types of labour market flexibility; external numerical flexibility—internal numerical flexibility, functional flexibility and wage flexibility. The literature on flexibility is expansive and will not be reviewed because it is not within the scope of this report.

In another study on clubs in New South Wales, Buultjens (2003) reported that low union membership in small businesses stemmed from employers' attitudes towards unions; the closer relationship between employers and employees; and the low level of conflict in small businesses. However, in this study Buultjens found that small club managers were more supportive of trade union membership than large club managers—possibly due to having less to do with unions—and also found no difference between the level of informal bargaining in small and large clubs. Small club managers were aware of their obligations under awards and preferred to stay within the award system. The survey also found no difference in flexibility or in club managers' perception of the impact of awards or trade unions between small and large club managers. Small clubs were less likely to have experienced disputes than large clubs.

EWRERC (2003) noted that small businesses had low levels of participation in business or industry associations, which are an avenue of information for firms on issues such as industrial relations, government policies and the economy. As such, small firms did not have access to important information, such as employment obligations. Looking at reasons why employers of small businesses may not have met their obligations under the award system, Buultjens (2003) found that it stemmed from a lack of knowledge, issues surrounding privacy and failure to detect non-compliance. Nonetheless, recent research has also highlighted that small firms may decide against joining an employer association because of fees involved and would instead obtain advice from government helplines or websites (Evesson et al. 2011).

Empirical research in Australia has been affected by changing industrial relations legislation and a unique awards system. The available research suggests that small business employers have low business or industry association membership and their employees have low levels of union membership. No clear conclusions can be drawn from the literature as to small businesses' responses to minimum wages adjustments or the extent to which small businesses are satisfied with the level of flexibility.

2.3 Small businesses and minimum wages in an international context

As there has only been a limited amount of Australian research into the effects of minimum wages on small businesses, this section provides a summary of the findings from international studies that have examined these effects. However, it should be noted that due, in part, to Australia's unique award system, most of this analysis cannot be replicated in an Australian context.

Most of the studies discussed tend to focus on the experience of the US and UK. The wage systems in these countries differ to Australia's because they do not have an awards system. The UK has a single National Minimum Wage (NMW), while the US has a federal minimum wage as well as many states having their own minimum wage above this level. Nevertheless, while these wage systems are different to that operating in Australia, these studies are reviewed because they provide some insight into the possible effects of minimum wage adjustments on small businesses, which draws on evidence lacking in Australia.

Recent international studies on minimum wages have been heavily influenced by the work of Card and Krueger (1994) and the introduction of the NMW in the UK in 1999.

Many studies in the US have applied Difference-in-Differences (DiD) analysis to estimate the employment effects of minimum wage adjustments, particularly among small to medium sized restaurants in the fast-food industry. A DiD approach generally involves comparing the changes between two groups of workers, in this case one group that received a wage increase and another that did not.

Katz and Krueger (1992) and Spriggs and Klein (1994) conducted telephone surveys of fast-food restaurants, asking managers or assistant managers for information on employment levels before and after a minimum wage adjustment. Using the DiD method, Katz and Krueger found a positive and statistically significant relationship of wages increasing employment, while estimates derived from Spriggs and Klein were not statistically significant.

Following Katz and Krueger, Card and Krueger (1994) conducted a survey of fast-food restaurants in nearby states to estimate the employment effects of the 1992 New Jersey minimum wage increase. For this study, Card and Krueger defined restaurants in eastern Pennsylvania not subject to adjustments made to the minimum wage as a control group and compared employment changes between stores in New Jersey and Pennsylvania, using the DiD approach. Employment was calculated as Full-time Equivalent[8] (FTE) employees, with average employment at 23.3 FTE workers per store in Pennsylvania and 20.4 FTE workers in New Jersey. Their results implied that the increase in New Jersey's minimum wage had raised employment in that state.

In response to that study, Neumark and Wascher (2000) collected payroll data to replicate the Card and Krueger analysis. Neumark and Wascher found quite different results. They found that the increase in the 1992 New Jersey minimum wage reduced employment in the fast-food outlets surveyed in New Jersey relative to Pennsylvania, some outcomes of which were statistically significant.

Using the payroll data gathered by Neumark and Wascher, plus additional longitudinal data, Card and Krueger (2000) again explored the effects of an increase in New Jersey's minimum wage. The revised analysis found small and statistically insignificant positive effects on total employment.

Using data obtained from a survey of small businesses in 1998, Levin-Waldman and McCarthy (1998) focused on the impact of a minimum wage increase on the hiring and employment practices of small businesses. Based on a nationally representative, stratified sample of 568 small businesses across different industries, the survey asked whether a recent increase in the minimum wage to $5.15 per hour would affect their hiring or employment intentions and also how a further increase to $6 per hour would affect their decisions. Their analysis found that a large majority of small businesses claimed that the minimum wage increase to $5.15 per hour did not affect their hiring or employment intentions. There was also strong evidence to suggest that a further increase to $6 per hour would not affect the hiring practices of most small businesses.

When looking at the types of small businesses most affected by the recent minimum wage increase, they found that the Retail, sales and trade and Food service industries had the highest proportion of firms whose hiring and employment practices were affected by the increase. In contrast, firms operating within blue-collar and public service industries were least affected. Levin-Waldman and McCarthy explained that this could be because firms within those industries pay an entry-level wage above the minimum wage. Their analysis found that, of those that were affected by the increase, 60 per cent paid a minimum entry wage and around 31.4 per cent paid above the minimum. However, they claimed that the relationship between entry wages and sensitivity to minimum wage changes was weak but stated that 'identifying those who bear the cost of minimum wage increases is an important concern for policymakers' (Levin-Waldman and McCarthy 1998: 3).

The introduction of the 1999 NMW in the UK facilitated analysis into the behaviour of small firms both before and after the introduction of the NMW.

8 Calculated as the number of full-time workers (including managers) plus 0.5 times the number of part-time workers.

Heyes and Gray (2004) studied the incidence of low pay across small firms in the service sector and the change to firms' pay practice after the introduction of the UK NMW. They concluded that pay determination in small firms is influenced by both internal and external factors. The paper found that the NMW made little difference to a firm's ability to recruit and retain workers. Firms responded to increases in labour costs by 'cost minimisation' strategies such as increasing prices and reducing working hours. Other methods used the 'quality maximisation' approach of improving the quality of their products and/or services or increasing the amount and/or quality of training offered. These strategies were not necessarily mutually exclusive, with firms undertaking more than one strategy. In the case studies examined in the paper, managers suggested that local labour market conditions were an important influence on pay and that the introduction of the NMW had little impact on the wage bill.

Arrowsmith et al. (2003) also found that the introduction of the NMW had little effect on small firms because wage levels were already at or above the NMW. However, managers explained that there were few options to offset the increase in the NMW through new technology or changing work practices and the work was usually simple and labour-intensive. Increasing work effort was not really an option for small firms as, unlike in large firms, cutting a worker leads to the job not being done rather than other employees working harder to make up for the loss of labour. Managers did not see pay as important in staff retention as they targeted specific labour market groups. As a result, most firms absorbed the increase in costs through changes to prices and profits. Some firms had falling productivity following this change, leading in some cases to increased supervision. Labour turnover was generally low, which meant that the relationship with workers was strong or that workers were difficult to replace. The process of pay-setting and determining wages were found to be less formal among small firms. Part of the reason is that small firms lack specialist human resource managers or the structures to conduct formal bargaining. Often managers of firms decided on wage increases alone.

Gilman et al. (2002) concluded that small firms' reaction to the introduction of the NMW was of broad acceptance by 'mainstream' firms and avoidance in marginal firms. Gilman et al. (2002) focused on the pay-setting structure of firms and found that there are a variety of different mechanisms for determining pay, with the effect of the introduction of the NMW to be relatively small because of these pay-setting structures that allow firms to absorb the wage increase. The paper found several processes of setting pay rates in the UK and therefore several responses to increases in the minimum wage. The paper identified four patterns of payment systems: firms on the margin of the formal economy; firms that set wages indeterminately without a fixed method; firms that balanced a rise in pay with increased employee effort; and firms that used technologies or other means for work reorganisation. Pay-setting was largely informal and had plenty of room for discretion. While pay was not set arbitrarily, managers were not set in their opinions on rates of pay. Workers in these firms understood their limited employment opportunities, but still expected 'fairness' in their pay. Fairness was also among employer's views on pay rates. The paper also noted that the pay-setting process does change with informality.

The implications of the NMW for training in small firms were also examined in Heyes and Gray (2003). Drawing on data derived from 258 establishments, they examined whether training practices had altered since the introduction of the minimum wage. Their results found that the NMW had provided a 'stimulus' to the training efforts of small firms through the 'shock' effect, whereby low-paying employers were 'shocked' by the increase and to counter its effects introduced new productivity-enhancing methods of production.

The international studies reviewed in this section present different responses by small businesses to increases in the minimum wage. The studies utilised various methodologies, although it is not possible to replicate these approaches in the Australian context.

2.4 Firm size and wage levels

There is a considerable amount of research into the relationship between firm size and wages, mainly comparing the wage rates paid by small firms with larger firms. In each study, the evidence has shown that wages in larger firms were higher than in small firms. However, studies on firm size and wages have generally found that none of the explanatory variables has fully explained the size-wage gap and that even after controlling for worker and/or job characteristics the size-wage gap remained (Troske 1999; Morrissette 1993; Brown and Medoff 1989). The variables analysed in the studies related to worker and firm characteristics such as education, industry and unionisation. Wage effects were found to reduce once unobserved heterogeneity was controlled for (Evans and Leighton 1988).

Some studies found that the firm size-wage gap was smaller than the establishment/plant size-wage gap (Troske 1999; Brown and Medoff 1989), however Evans and Leighton (1988) found that large plants operated by large firms paid higher wages than smaller plants operated by large firms. Hettler (2007) found that the industry composition can offset some of the wage differential, though Brown and Medoff (1989) found that the wage differentials across industries were similar and concluded that the size-wage gap occurs within detailed industries and occupation classifications.

Some papers contended that large firms employ higher-skilled workers because they are relatively more capital intensive (Brown and Medoff 1989; Belfield and Wei 2004). Large firms were described as having more sophisticated or complex capital and production processes (Troske 1999; Ferrer and Lluis 2008) and therefore required greater demand for higher-skilled workers. Evans and Leighton (1988) found that more educated workers were located in larger firms and plants and that workers in large firms were more productive. Ferrer and Lluis (1998) added that large firms have more resources to attract higher-skilled workers. Skill and technology had a significant effect on earnings, while the proportion of workers with higher degrees was found to be statistically significant. However, after controlling for skill and the capital-labour ratio, Belfield and Wei (2004) found that the size-wage effect was not reduced. Revesz and Lattimore (1997) also noted that the size-wage gap can be accounted for by the lower education and skill levels of small firm employees. Evans and Leighton (1998) added that as small firms are less capital-intensive, and as capital and skill are complements, then large firms would be expected to offer higher wages and have higher-skilled workers.

Further explanations for the wage gap were that large firms are managed by higher-skilled managers who hire higher-skilled workers and that higher-skilled workers were matched together in larger firms (Troske 1999). The results in Troske (1999) supported the theory that higher-skilled workers work in large firms and that higher-skilled workers tend to work together. However, even after controlling for this, Troske (1999) still found a wage gap between large and small firms; that workers who worked in more capital-intensive plants were paid higher wages; and also that there was a strong relationship between capital intensity and worker skill. Troske (1999) concluded that the only explanations that accounted for the size-wage gap were the matching of higher-skilled workers together in larger plants and the capital-skill complementarity. Belfield and Wei (2004) found that managers in larger firms have more experience and qualifications and are more likely to report higher financial performance and labour productivity growth. However, these results were only weakly significant.

A difference in monitoring costs between firms is also used to explain the wage differential. It is argued that large firms have higher monitoring costs and therefore value observable skills (such as education and experience) relatively more than small firms (Ferrer and Lluis 2008). Garen (1985) elaborated by explaining that firms make wage offers based on an imperfect evaluation of workers' abilities and screen workers with less accuracy. Therefore, large firms rely more on observable characteristics and would choose those with higher levels of education. Large firms may pay higher wages as a disciplinary way of monitoring their workers (Morrissette 1993). Ferrer and Lluis (2008) suggested a firm size threshold above which monitoring costs become too high and screening based on measurable skills become preferable. Troske (1999) stated that this theory reflects

a trade-off made by large firms of higher wages to reduce monitoring, however concluded that the cost of monitoring was not a function of plant or firm size. However, Evans and Leighton (1988) found that experience was not a quality that large firms desired and the probability of working for a large firm was independent of job experience.

The findings of Garen (1985) supported the argument that as large firms have less accurate information on potential employees, the dispersion of wages in these firms would be smaller. One reason for this is that employees in large firms are more intuitive to wage relativities (Agell 2004). However, Brown and Medoff (1989) found that greater establishment size was associated with higher wage dispersion. This study also found that the wage differential decreases with increasing skill level for professional, technical and managerial workers. Agell (2004) found that larger establishments have a more skewed earnings distribution. The paper agreed that piece rates should be the preferred pay as it creates a direct link between worker output and pay. However, piece rates were rarely used, while Brown and Medoff (1989) found that larger firms pay more even for piece-rate workers.

Another theory is that large firms pay higher wages and offer better benefits to deter their workers from joining a union (Brown and Medoff 1989). Morrissette (1993) tested for this and did not find it explained a substantial amount of the wage gap and this conclusion is supported by Brown and Medoff (1989). Belfield and Wei (2004) noted that unions are actually more prevalent in large firms because of economies of scale in bargaining and/or union formation and that this reduces the size-wage effect. Belfield and Wei (2004) concluded that large firms pay more because unions allow workers to obtain more of the surplus. Hettler (2007) found that workers in large firms were more likely to be part of a union and Revesz and Lattimore (1997) found that union membership tends to be lower in small firms.

Studies have also examined the perception that working conditions of large firms are worse than those of small firms (such as Morrissette 1993). Poorer working conditions could include less freedom of scheduling or longer commuting (Brown and Medoff 1989) and less job security and fewer development opportunities (EWRERC 2003). However, Brown and Medoff (1989) did not find this to be significant, nor did modelling by Evans and Leighton (1988), who measured both job quality and tenure. Belfield and Wei (2004) also controlled for working conditions and concluded that they did not reduce the size-wage effect significantly. However, the paper found that variables that measure quality of work were positively correlated with firm size. Revesz and Lattimore (1997) noted that absenteeism tends to be lower among workers in small firms, supporting the argument that there is closer supervision. However, Brown and Medoff (1989) noted that working conditions are difficult to measure and hard to define.

Another theory is that large firms exhibit some market power and share some of their excess profits, or rents, with their employees (Morrissette 1993). Troske (1999) added that sharing some of these rents with employees is an incentive to increase their efforts. Troske (1999) found that workers in plants that produce output in concentrated markets received higher wages, yet concluded that market power is uncorrelated with plant or firm size. Belfield and Wei (2004) added that this may be due to large firms facing competition from imports and infers only weak effects. The effects were found to be stronger at the firm and not plant level. However, Brown and Medoff (1989) found little evidence to support this theory. Belfield and Wei (2004) also asked why managers would share their rents with other workers.

Large firms may also have higher training costs (Morrissette 1993). Troske (1999) explained that large firms and their employees were more likely to invest in firm-specific human capital as a result and concluded that large firms may not only hire higher-skilled workers but 'produce' higher-skilled workers. Small firms were less likely to provide formal training (EWRERC 2003). Belfield and Wei (2004) found a modest but positive correlation between training and firm size. Revesz and Lattimore (1997) found that training costs as a percentage of wages

and salaries were lowest for small firms. Morrissette (1993) found that the difference between wages is higher for full-time workers as training costs were more similar for part-time workers, and Hettler (2007) found that workers in large firms were more likely to work full time.

A positive correlation has been hypothesised between wages and firms' growth and survival and that firms who pay their workers 'well' will survive longer (Troske 1999; Brown and Medoff 1989). However, Troske (1999) did not find evidence to support this at the plant level. Arrowsmith et el. (2003) stated that low pay was accepted at times because the worker was a secondary household earner or a young adult in education and/or living at home with parents. As such, managers did not see pay as important in retaining their workers.

Belfield and Wei (2004) concluded that one reason large firms offer higher wages is because they have internal labour markets permitting better matches between workers and jobs. Another theory is that large firms offer higher wages to attract more job applicants (Morrissette 1993; Weiss and Landau 1984).

Financial resources may also be a factor. Buultjens (2003) found that larger clubs pay higher wages than smaller clubs, with larger clubs more likely to pay over-award wages to managers and employees than smaller clubs. However, while larger clubs were more likely to pay over-award wages to managers than employees, smaller clubs were more likely to pay over-award wages to employees than managers. The paper suggested that small clubs were less likely to be in a strong enough financial position to pay over-award wages.

In an Australian study, McGuiness et al. (2006) used the EEH survey to explore characteristics of firms employing 'low-paid' employees based on given thresholds. The characteristics that were examined included industry, state/territory and firm size. The study created six firm size bands based on the number of employees. The smallest band, 1 to 19 employees, was found to comprise the highest proportion of 'low-wage' employers—where 50 per cent or more of the firm's employees were paid less than a given amount. Although the largest firm size comprised the lowest percentage of 'low-wage' employers, the findings were non-linear, as the concentration of employers of the low paid did not decline consistently with firm size.

In summary, a review of the studies found that wages in large businesses are higher than wages in small businesses. However, there is no clear explanation for this finding.

2.5 Firm size and indicators of performance

Many studies found that firm size was likely to have an influence on indicators of performance, such as productivity, profitability, finance and survival rates. As such, any changes that could have an impact on these indicators, such as wage increases, could affect small firms differently to larger firms.

Rogers (1999) investigated whether profitability of small firms differs to large firms. The results showed that small firms had higher profitability, though there is likely to be substantial variations across and within industries. The paper showed that the 'dynamic' view, where variables are changing, may be more appropriate in manufacturing, while the 'traditional' view may be more appropriate in non-manufacturing. It was suggested that this may be due to differences in costs or market share, or possibly that the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry categories did not accurately define a market.

Draca et al. (2006) examined minimum wages and firm profitability using two different types of firm level data in the UK. The data sources used were a specialised data source on workers in residential care homes and an economy-wide firm level database, FAME (Financial Analysis Made Easy), that covered registered firms in the UK. The residential care sector was chosen because it was characterised by a large concentration of non-unionised, low-wage employees working in small firms with an average employment level of 15 to 20 workers. FAME also

covered many small, low-wage service sector firms. Using DiD to estimate the change in average profits before and after the introduction of the UK NMW, Draca et al. (2006) found that profit margins were reduced in low-wage firms compared to margins in higher wage firms following the introduction of the UK NMW. However, they did not find any evidence of firm closures among low-wage firms and suggested that wage gains accruing to low-wage workers were financed by squeezing profit margins. Rogers (1999) claimed that large firms would have greater profit potential if they exhibited greater market power or may collude; while the actions of small firms do not cause reactions from others, but they could create high profits by staying 'ahead of the market'.

Looking at productivity across firms and industries, Rizov and Croucher (2011) found that the largest relative increases in productivity occurred in large firms in aggregate and in the services sector, while in manufacturing the largest increases occurred in medium-sized firms. Large firms may have greater capacity to reorganise production or labour and may have better management structures and practices, while small firms tend to be more reactive.

However, there may be problems with measuring productivity for both small and large firms. Determining productivity in larger firms may be difficult as large firms have larger work groups, making it harder to determine the productivity of individuals (Brown and Medoff 1999). A large firm's wage distribution would be more compressed if the firm's estimate of productivity is less reliable. For small firms, Evesson et al. (2011) found that rather than measure productivity formally, owner-managers of small firms informally checked on staff while on the job. Firms in different industries measured this with different factors such as customer service and the efficient use of capital.

Based on the literature reviewed in Farmakis-Gamboni and Yuen (2011), the relationship between productivity and minimum wages is ambiguous because it is not clear whether increased training or the substitution of low-skilled labour for high-skilled labour is driving the results. Furthermore, their literature review found that while theory suggests that minimum wages adversely affect profitability and firm survival, the evidence appears to be inconclusive.

Further differences between small and large firms were found in Juniper et al. (2004), which explained that larger firms operate as smoothers of demand shocks through their supply chains, while small and medium enterprises (SMEs) are more dependent on the income and wealth generated within their local area. SMEs are also less dependent on long-term credit and equity raising and more dependent on public research and development and subsidies which are more stable than the private sector over the business cycle.

Arrowsmith et al. (2003) explained that small firms are more exposed to competitive markets, are incapable of influencing their environment and more vulnerable to regulatory shocks. As a result, they have fewer strategies available to counter increases in costs that may not be accompanied by increases in productivity. A number of small firms are exposed to changes in market conditions due to a reliance on a small number of suppliers or customers and a lack of risk management strategies culminating from basic management practices (EWRERC 2003).

Haswell and Holmes (1989) commented that there are problems that surround appropriate measures of business failures, particularly because accurate or meaningful assessments are difficult to make. For example, they noted problems of business classification, definitions of failure and data collection and suggested that failure statistics which can enable broad cross-industry comparisons would be more useful than attempts made to accurately specify the 'actual' rate of failure.

While Watson and Everett (1996) concurred that the various definitions of failure affect failure rates, they sought to clarify the misconception that small businesses have a very high mortality rate. The study reported failure rates from 5196 small business start-ups over the period between 1961 and 1990 in 51 managed shopping centres across various states of Australia. They found that 50 per cent of small businesses were sold or liquidated over the period of the study and commented that the definition of failure used affected the failure rates, noting that the broader the definition, the higher the failure rate. The four definitions of failure reported were: discontinuance of a business for any reason—which ranged from changes in ownership or closure (discontinuance of ownership) to cease in operations (discontinuance of business); bankruptcy/loss to creditors; disposed of to prevent further losses; and failing to 'make a go of it'. Depending on the definition of failure selected, failure rates varied from a high of more than 9 per cent per annum to a low of less than 1 per cent per annum. The results found that except when failure was defined as 'discontinuance of ownership', failure rates were not considered to be 'as catastrophic as the general folklore' would suggest (Watson and Everett 1996: 57). They did note that the low failure rates reported in this study could be due to the process of tenant selection and the constant monitoring of tenants, which may be responsible for the reduced failure rates of small businesses operating in managed shopping centres. They also found that for all definitions of failure, over 90 per cent of the businesses that failed were less than 10 years old.

In conclusion, a review of the studies found that profitability differed between low-wage and high-wage firms, and that productivity and business failure rates are difficult to measure.

2.6 Firm size and employment dynamics

Employment dynamics refer to concepts such as job creation, destruction and tenure. These concepts are reviewed as changes to wage levels can potentially impact on each. Research shows that these dynamics can vary according to firm size.

Changes to the number or proportion of small firms can mean different things. An increase in small firms may be deemed as positive due to an increase in start-up firms, although this may also occur during downturns as medium firms shed employees and change classification. Conversely, a reduction in the number of small firms may mean that firms are increasing employment and shifting to the medium firm category (EWRERC 2003; Helfand et al. 2007). Small firms may also adjust to lower demand by reducing hours worked rather than employment, while large firms can afford to reduce staff (Revesz and Lattimore 1997).

Small firms may try to avoid losing a worker with a specialised skill, while large firms have many workers with similar specialised skills. Revesz and Lattimore (1997) found that during the early 1990s downturn, the share of small businesses increased by more than three percentage points and then decreased by more than one-and-a-half percentage points following the downturn. Also, during downturns people may respond to spells of unemployment by looking at self-employment, or acceptance of part-time or casual work with lower pay. The paper found that the share of small firms reflects structural change in the economy. That is, the share of small firms would increase (decrease) when industries/sectors that have a larger share of small firms expand (decline).

Growth in the number of small firms has been assisted by technology advances via cost reductions that were previously available only to large firms (Revesz and Lattimore 1997). However, small firms are not necessarily a job creation sector. Many new jobs created in small firms arise due to the replacement of jobs in other sectors or because the demand for products or services supplied by small firms increased (Revesz and Lattimore 1997). Evans and Leighton (1988) argued that there has been an increase in small businesses due to the decline of manufacturing and the rise of the services sector, deregulation of major industries and 'entrepreneurial spirit'.

Differences between the employment outcomes of employees in small and larger firms have also been found, where job tenure increases with size and job losses decrease with size (Evans and Leighton 1988). The authors noted that jobs with longer tenure will lead to less job turnover and as small firms are more likely to fail or have variable growth, jobs in small firms are more likely to be less stable. As well, married workers, workers who have voluntarily changed jobs less often and workers terminated from previous jobs less often are more likely to work for larger firms and plants.

Brown and Medoff (1989) explained that employees may be less likely to leave large firms as there may be greater opportunities to move within the firm. Their study found that firm size was significantly negatively related to the probability of changing employers and that workers in the same job (defined by occupation) were more likely to remain in that job if working for a large firm. That is, large firms may have internal labour markets where they can allocate labour more efficiently and reduce job turnover. This argument was extended by Belfield and Wei (2004) who add that as workers in large firms were more likely to remain in their jobs for longer they accumulate more firm-specific human capital, leading to higher wages. Lower quit rates may also be due to firm-specific training in large firms, yet it still does not explain the higher initial wages paid to new workers (Brown and Medoff 1989).

Revesz and Lattimore (1997) found significantly higher rates of job gains and losses in small firms than in larger firms. The difference was mainly due to new openings and closures, suggesting that employment stability was lower in small firms. Higher job turnover may also come from limited internal labour markets and lower investment in training. The paper contended that workers in smaller firms should therefore receive higher wages to compensate for the instability in small firm employment. One reason for the paper finding a negative relationship between job tenure and establishment size is that small firms tend to be younger firms.

Juniper et al. (2004) found that job creation rates increased with firm size and that larger firms have lower job destruction rates. Job destruction rates also declined as firms matured. Evans and Leighton (1988) also found that jobs in smaller firms had shorter and more variable duration and will therefore attract workers who value job duration and stability the least. This may explain why small firms employ more women, teenagers and older workers. That is, disadvantaged groups were employed because they were likely to accept the lower wage rates and therefore reduce the high level of turnover (Buultjens, 2003).

Helfand et al. (2007) found that larger firms have lower turnover rates. Using data derived from the Business Employment Dynamics program of the US Bureau of Labor Statistics, Helfand et al. (2007) looked at quarterly data on gross job gains and gross job losses by business size from the second quarter of 1990 through the third quarter of 2005.

Their results found that small firms had created 64 per cent of new jobs and that firms of different size classes behaved differently across the business cycle. They noted that a majority of net job losses in the 1991 recession had occurred in small firms, while a majority of job losses during the economic slowdown of 2001 took place in larger firms.

A review of the studies has found that job tenure appears to be longer in larger firms, with employment stability being lower in small firms.

2.7 Conclusion

Various descriptions of small businesses have been used in previous research. Most use a maximum number of employees as their definition. There have been few recent studies on small businesses in Australia, with Evesson et al. (2011) the only research undertaken since the *Workplace Relations Act 1996*. The more recent studies found that small businesses have a greater reliance on awards than larger businesses and that some employers had difficulty understanding awards. However, awards were not found to inhibit flexibility as employers generally used discretion when deciding on labour strategies.

A number of US and UK papers have studied the effects of minimum wage increases on small businesses with little consensus. Many of these studies used the DiD method. Some papers found that firms responded to the increase in the minimum wage with various methods. Though a number of theories were tested, there was also little consensus as to why large firms offer higher wages than small firms. Many of the models tested could only partially explain why this occurred.

Measuring productivity and business failure rates is difficult and as a result the findings were inconclusive. Attitudes to debt were separated by firm size as small businesses often have fewer options than large businesses. Differences in management structure was also linked to firm size, with the more direct approach of small firms found to be both an advantage and disadvantage. Higher rates of job losses in small firms were also found, with internal labour markets in large businesses leading to less job destruction.

The literature review has uncovered the limited amount of research into small businesses in Australia, particularly in recent times and with regard to the effects of award wage increases. International studies on minimum wage increases have tended to analyse small firms due to their greater likelihood of employing lower-waged workers. However, much of the international research has focused on the comparison between wages paid in small and large businesses.

3 Data sources

Data have a primary role in determining the type of analysis that can be undertaken, and data limitations also influence how analysis is conducted. This chapter will highlight the characteristics and limitations of the datasets used in the analysis and also discuss other potential datasets that may assist in minimum wages research, such as a LEED.

The key datasets that can be used to analyse small businesses and their employees by their pay-setting arrangements are the BLD, EEH and the HILDA surveys. The BLD and the EEH are employer-based surveys, while HILDA is an employee survey. While the EEH is an employer-based survey, it focuses on the characteristics of employers and employees by pay-setting method, while the BLD examines the characteristics of businesses. The HILDA survey contains data on the characteristics of employees by pay-setting method.

Data limitations for the analysis varied across the surveys. For the ABS surveys used in this report, and the EEH in particular, the main limitations stemmed from the amount of data unavailable due to reasons of confidentiality. There are also concerns about the pay-setting variables for the BLD and the HILDA survey. In particular, the ABS omitted the method of setting pay variable from its recent BLD release. Creating a LEED for Australia, which matches information collected from businesses with information from households, would enable a better understanding of the relationship between minimum wages and employment, productivity, business competitiveness and viability in Australia.

3.1 ABS surveys

ABS surveys that are used to analyse the characteristics of small businesses and their employees are all employer-based surveys. Among these, the EEH is an employer-based survey that focuses on the characteristics of employers and employees, while the BLD, Australian Industry and Counts of Australian businesses surveys are employer-based surveys that examine the characteristics of businesses.

The main limitation that affects the use of ABS data is the amount of data unavailable due to confidentiality requirements. Under the *Census and Statistics Act 1905*, it is an offence for the ABS to release any data that can potentially identify any particular individual or organisation. This presents problems for all ABS datasets, as the ABS has to balance releasing as much data as possible without compromising the confidentiality of individuals and organisations.

3.1.1 BLD

The BLD contains a range of data that can identify the performance of small businesses across employment arrangements and is the only Australian dataset that allows for such analysis. It is a longitudinal dataset that contains business characteristics and financial data. The current BLD contains two independent samples (known as panels) drawn annually from the Australian business population, with panel 1 spanning between 2004–05 and 2006–07 and panel 2 spanning between 2005–06 and 2006–07.[9] Forthcoming releases of the BLD will contain up to five panels that span a maximum of five years.

9 As most variables of interest are only available from 2005–06 onwards, figures from 2004–05 are not presented for panel 1.

As it is designed to represent the Australian business population at the time of its introduction, each panel is stratified by industry division and business size (but not by geography).[10] During its period of introduction, panel 1 had 2159 employing businesses representing 705 675 businesses, while panel 2 had 2297 employing businesses representing 709 468 businesses.

There are a number of business types not included in the survey, with the main exclusions being large businesses (those with 200 or more employees) and businesses in the following industries:

- Electricity, gas and water supply;
- Finance and insurance;
- Government administration and defence;
- Education;
- Health and community services; and
- Other services.[11]

The survey excludes some industries mainly because they are dominated by government enterprises or classified as non-profit institutions serving households.[12]

The ABS omitted the method of setting pay variable from its recent release of the BLD, which includes an additional panel of businesses and covers the period between 2004–05 and 2009–10. As this variable is integral to the analysis, data from the new BLD will not be analysed.

3.1.1.1 Limitations

The key limitation with the BLD for this analysis is its method of setting pay variable, which in its current form does not indicate the relative importance of awards in a particular business. Although these data were collected numerically, the data were output in the BLD CURF as an indicator variable only. The ABS noted that data were not released numerically due to data quality concerns and confidentiality requirements. To quality assure numerical data is resource intensive. The question on pay setting arrangements was split into five categories which, when added, are supposed to equal the total employment figure provided elsewhere. In practice, these two total figures often do not match due to the incidence of working proprietors, partners or directors being misreported and the inadvertent omission of employees where the provider was unsure of which category to report them under. The employment variable itself is collapsed into ranges to maintain confidentiality and, as a corollary the pay setting variable is also 'masked' by being output as an indicator variable.

As a result of this limitation, the analysis has grouped businesses into three categories—awards, non-awards and a combination of award and non-award arrangements. If data on the relative importance of awards in a particular business were available, then the group of businesses that use a combination of award and non-award arrangements could be separated further by the relative importance of award arrangements in their businesses.

10 All figures presented in this section are weighted using the longitudinal weights. This ensures that the sample is representative of the Australian business population at the time of the sample's inception.

11 For a detailed discussion on the scope and coverage of the survey, please refer to the ABS (2009), *Business Longitudinal Database, Expanded CURF, Technical Manual*, Catalogue No. 8168.0.55.002, pp. 3–4. Other services is a 2-digit industry that belongs in Personal and other services.

12 ABS (2009), *Business Longitudinal Database, Expanded CURF, Technical Manual*, Catalogue No. 8168.0.55.002, p. 4.

Further, the ABS omitted the method of setting pay variable from its forthcoming BLD release, as from 2007–08 onwards, the pay setting question had not been asked on the Business Characteristics Survey form. The ABS noted that this is due to consideration, in the context of available resources, of data quality issues, provider load and the emergence of other higher priority employment-related questions on flexible working arrangements.

Another limitation of the BLD is that it contains less information than its predecessor, the Business Longitudinal Survey (BLS), and as a consequence sound quantitative measures of productivity and profitability cannot be produced. The BLD follows the annual BLS, which covered the period between 1994–95 and 1997–98. Both datasets contain characteristics and financial data to help analyse changes in the performance over time of small and medium businesses. However, in contrast to the BLD, the BLS provided a greater amount of financial data and employment data. For example, the BLS provided numbers of employed persons at an aggregate and disaggregated level, taking into account employees newly employed during the year and employees that ceased to be employed. Labour quantity is normally measured in terms of the number of employees. As adjustments should be made for the extent of part-time work, an ideal measure is 'effective full-time labour'. However, this variable cannot be generated using the BLD, as numbers of people employed full time and part time are not available. The BLD instead presents its employment data using categorical variables, which assign the number of people working full time and part time into two categories, where 1 represents 0 to 4 persons and 2 represents 5 or more persons. A consequent weakness in presenting employment data using these categories is that it is not possible to identify whether businesses actually hired these types of workers.

In addition, the BLS contained a broader range of financial items such as actual profit or loss before tax, value of current and non-current assets, capital expenditure and disposals, including expenditure on research and development. In contrast, the BLD does not include quantitative data on profit or loss before tax, and does not present a breakdown of assets and liabilities, nor does it include a value of rent, leasing and hiring expenses to provide an appropriate measure of capital. The construction of value added is also imperfect since data on inventory levels are not surveyed in the BLD. Rogers (1998) asserted that output should be defined as the real output produced in a set time period. Rogers stated that the sales or revenue figure normally reported in accounts would not coincide with this if inventory levels had risen or fallen over the period, arguing that adjustments for the level of inventories should be made.

As a result, sound quantitative measures of productivity cannot be constructed because variables such as effective full-time labour, capital and value added cannot be generated using the BLD.

To compensate for this, the BLD introduced qualitative measures to evaluate productivity and profitability across firms. However, these measures are subjective and should be considered only as proxies for variables of interest. A major shortcoming of subjective measures is that firms may interpret and measure the given indicator in different ways. Another problem with qualitative measures arises when observing these indicators over time. For example, the overall effect on productivity cannot be quantified when a business reports an increase in productivity in 2005–06 but a decrease in 2006–07.

For the report's data analysis, small sample sizes are an issue as comparisons of small and medium businesses by employment arrangements are not feasible, as medium businesses constitute only around 5 per cent of the business population in the BLD. The BLD also does not contain information on large businesses. However, if these businesses were included in the BLD, small sample sizes would likely be an issue for the analysis.

Modelling was not undertaken using the BLD because it lacks a broad range of financial data and employment data. For this reason, and because most of the variables are qualitative variables, robust conclusions could not be made from the models.

3.1.2 EEH

The EEH is an employer-based survey conducted biennially. Micro data drawn from the May 2006 survey and the May 2010 survey have been released in the form of CURFs.[13]

The EEH surveys, conducted on a sample of employees from a sample of employers, are used to examine the characteristics of employers, such as industry and firm size; and their employees, such as sex, weekly earnings, occupation, employment type, full-time and part-time status and method of setting pay. The EEH sample size consists of around 9000 employers, covering approximately 60 000 employees.

The EEH includes all employing businesses in Australia except for:

- businesses in Agriculture, forestry and fishing;
- private households employing staff; and
- foreign embassies and consulates.

3.1.2.1 Limitations

Due to confidentiality concerns, industry data were omitted from the 2006 EEH CURF, which significantly limits the type of analysis that can be conducted. The inclusion of industry data in the 2010 EEH CURF is a much welcomed addition, although this resulted in the omission of variables that were available in the 2006 EEH CURF, such as state and sector. The exclusion of the sector variable, which differentiates between employees of the private and public sector, from the 2010 EEH CURF in particular has affected the analysis as the 2006 EEH analysis cannot be replicated with the 2010 CURF. To compensate for this, the 2010 EEH analysis excludes employees that work in the Public administration and safety industry.

The EEH survey is also not a longitudinal survey, which limits the analysis that can be undertaken. The ability to track the transition of respondents is a significant feature of the HILDA survey and BLD, and facilitates robust analysis. The variables in the EEH are also limited. As it is an employer survey, the ABS could enhance the EEH by asking more questions about business characteristics, similar to questions in the BLD relating to productivity, business competitiveness and viability.

Econometric modelling using the EEH was not undertaken due to the limited number of explanatory variables available.

For the analysis in this report, small sample sizes may have affected comparisons at detailed breakdowns (eg. by worker type, industry, full time/part time and sex), but this was only relevant for groups that are not particularly well represented, such as award-reliant managers.

13 Note that no CURF was released for the 2008 EEH survey.

3.1.3 Australian Industry

The Australian Industry survey is an annual employer survey that contains information on income, expenses, industry value added, operating profit before tax, employment, wages and salaries and numbers of operating businesses. In 2005–06, it had a sample of 21 487 businesses, representing 2 771 386 businesses across Australia.

The Australian Industry survey includes all businesses in the Australian economy except for:

- businesses that are classified as being in the public sector;
    - This particularly affects the Education and Health and community services industries and results in the exclusion of the Government administration and defence industry. However, businesses classified in the public sector in the Water supply, sewerage and drainage services subdivision are included;[14]
- businesses in the Finance and insurance industry.[15]

3.1.3.1 Limitations

Due to changes to the Australian Industry survey in 2006–07, small businesses and non-employing businesses are now combined into one group. As previous data have established that the characteristics of small businesses and non-employing businesses are very different, characteristics of small businesses cannot be analysed from 2006–07 onwards. Another limitation with the Australian Industry survey is that it does not contain any information on the method of setting pay of businesses.

3.1.4 Counts of Australian Businesses

The Counts of Australian Businesses survey contains data on the number of businesses, business entries, exits and survival by industry, state and territory, type of legal organisation, institutional sector, size, and annual turnover ranges. Data from this survey are sourced from the ABS business register. While this survey has been released at infrequent intervals in the past, the ABS are planning to update this survey yearly in the future.

The Counts of Australian businesses survey includes all actively trading businesses in the Australian economy. Hence, businesses that are excluded are firms that are not actively trading in the market sector and are therefore not considered to be businesses. This excludes the public sector, which particularly affects the Public administration and safety, Education and training and Health care and social assistance industries.

3.1.4.1 Limitations

The main limitation of the Counts of Australian Businesses survey for the analysis is that it does not separate businesses by their pay-setting arrangements. Hence, it can be used only to gauge the number of businesses, and business entries, exits and survival rates by employment size.

14 This is a 2-digit industry within Electricity, gas and water supply.
15 ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0, p. 80.

3.2 HILDA

The HILDA survey is an annual longitudinal study of Australian households which began in 2001. It includes data on economic and subjective well-being, labour market dynamics and family dynamics. Specifically, in terms of the characteristics of employees, it contains all the data that are currently in the EEH (except for data on jurisdiction), as well as other variables such as job tenure, union membership, work entitlements and education. Its longitudinal nature also allows for the analysis of labour market transitions of employees by pay-setting arrangements.

HILDA is a representative sample of the Australian population stratified by geography, with Wave 9 containing 7234 households covering 17 630 people. Note that survey participants can move out of the scope of the survey if they moved overseas, died between waves, or if they were temporary sample members who moved out of the household.

3.2.1 Limitations

There are concerns about the accuracy of method of setting pay variable in HILDA, as it is a household survey and data on earnings are obtained through respondents and not employer payroll records. As a result, respondents may not be aware of the industrial instrument that determines their pay and may not provide an accurate answer. Wooden (2010) acknowledged that these data were far from perfect, as award reliance was overstated. However, Wilkins and Wooden (2011) examined the quality and usefulness of the data and found that, in comparison with the EEH data (which involves the collection of data from employers), once public sector employees are treated as not being reliant on awards, the HILDA survey generates 'data that can be used to draw meaningful inferences about the minimum wage-reliant population of workers.'[16] Wilkins and Wooden found that, according to the EEH survey, virtually no public employees are reliant on an award for their pay, while in the HILDA survey data, 29 per cent of employees working in the public sector reported that they were paid exactly the award rate. They state that one possible source of this over-reporting lies in the definition of award reliance, particularly with respect to the reference made to Australian Pay and Classification Scales. According to Wilkins and Wooden, Australian Pay and Classification Scales may have been incorrectly interpreted by respondents as being the same as the Australian Public Service pay scales.

Another limitation with HILDA data for this analysis is that its earnings data do not differentiate between overtime and ordinary time earnings. Focusing on changes in ordinary time earnings rather than total earnings reduces the volatility stemming from changes in overtime earnings.

As in the EEH analysis, small sample sizes can affect comparisons at detailed breakdowns (eg. by worker type, industry, full time/part time and sex) but this only affects groups that are not particularly well represented, such as award-reliant managers.

16 R Wilkins and M Wooden (2011), *Measuring Minimum Award Wage Reliance in Australia: The HILDA Survey Experience,* Melbourne Institute Working Paper No. 11/11, p. 13.

3.3 Linked Employer-Employee Dataset

A potential avenue for new data to aid in minimum wages research would be the creation of a LEED in Australia. This dataset would match information collected from businesses with information from households. The general benefits of creating a LEED are noted in Healy et al. (2011) and are summarised below:

- a LEED would allow for simultaneous research on the differences in workers, businesses and their interactions;
- a longitudinal LEED would allow for a comprehensive analysis on the dynamics of the labour market, such as separating the effects from changes in demand and changes in supply. In particular, the effects of training and human capital accumulation and utilisation could be analysed in greater detail; and
- a LEED would allow for the analysis of productivity and the life cycle of a firm, such as its birth, growth, decline and death, at a firm, sector and aggregate level.[17]

Specifically, for a minimum wages research context, creating a LEED would likely allow for a better understanding of the relationship between minimum wages and employment, productivity, business competitiveness and viability in Australia. This report uses a mixture of employer and employee datasets to illustrate, to the extent possible, the impact of minimum wages on small businesses and their respective employees. However, as these datasets are not linked, information on the interactions between award employees and their respective firms cannot be analysed. Furthermore, individual datasets are often specialised in that they contain data that are unique to their particular dataset. As a consequence, data that may be useful in one dataset may not be available in another dataset. For example, the HILDA dataset contains rich employment data that would be particularly informative if it was also available in the BLD. In addition, the extensive number of variables in a LEED would facilitate robust econometric analysis relating to the impacts of minimum wages.

3.4 Conclusion

The main findings in this chapter were:

- the key datasets that can be used to analyse small businesses and their employees by their pay-setting arrangements are the BLD, EEH and the HILDA surveys;
- the BLD and the EEH are employer-based surveys, while HILDA is an employee survey. However, while the EEH is an employer-based survey, it focuses on the characteristics of employers and employees by pay-setting method, while the BLD highlights the characteristics of businesses. The HILDA survey contains data on the characteristics of employees by pay-setting method;
- data limitations for the analysis varied depending on the survey;
- for ABS surveys in general, the main limitations stemmed from the amount of data unavailable due to confidentiality as not all data collected by the ABS are accessible:
    - for the EEH survey, this involved the exclusion of the industry variable from the 2006 EEH CURF; however it was included in the 2010 EEH CURF at the expense of the state and sector variables;

17 Healy J, McDonald I, Macaitis K, Mavromaras K and Sloane P, *Research framework and data strategy,* Research report 4/2011, National Institute of Labour Studies, Flinders University, report commissioned by Fair Work Australia 2011 pp. 55–56.

  - for the BLD, the pay-setting variable is less than ideal, as it does not indicate the relative importance of awards in a particular business. The ABS also omitted the method of setting pay variable from its recent BLD release. There is also a lack of financial and employment data in the BLD relative to its predecessor (the BLS), which means that sound quantitative measures of productivity and profitability cannot be constructed. As a consequence, qualitative measures are used for the analysis, which can be considered only as proxies for these variables;

- the main limitation with the HILDA survey for this analysis is the accuracy of the method of setting pay variable, as it is a household survey and data on pay-setting methods are obtained through respondents and not employer payroll records. However, this is partly addressed in the analysis by excluding public sector employees, as significant differences between the EEH and HILDA are partially due to HILDA overestimating the award reliance of public sector employees; and

- creating a LEED for Australia, which matches information collected from businesses with information from households, would allow for a better understanding of the relationship between minimum wages and employment, productivity, business competitiveness and viability in Australia.

4 General characteristics of small businesses in Australia

This chapter presents the general characteristics of small businesses in Australia, including the number of businesses, industry value added, employment, wages and business entry, exit and survival rates. These economic indicators are compared across small (1 to 19 employees), medium (20 to 199 employees) and large (200 or more employees) businesses.

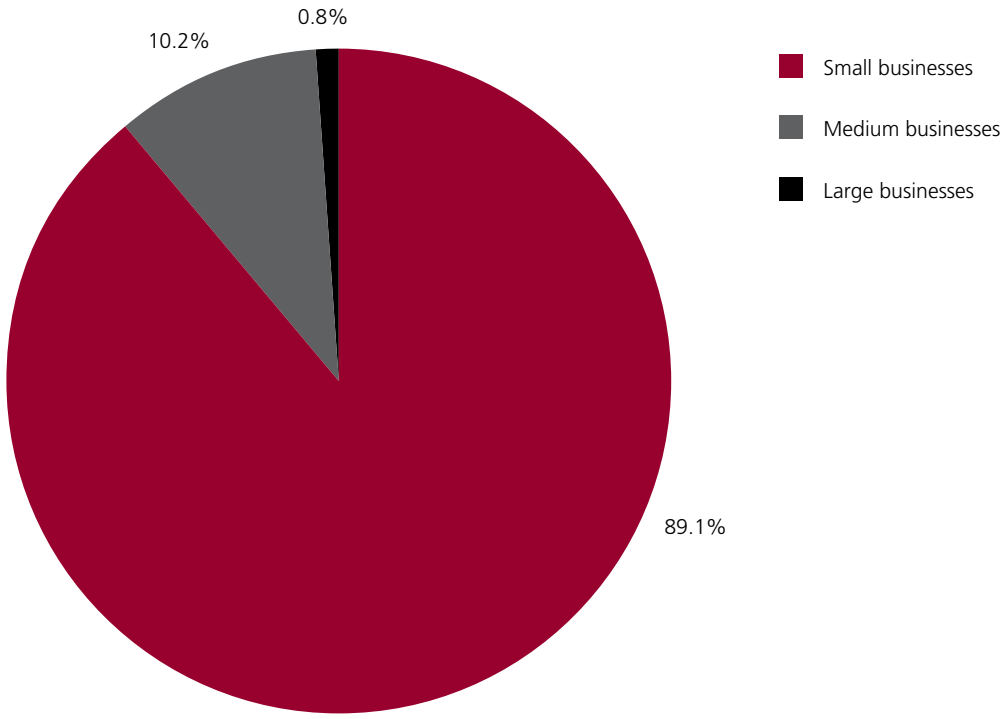
The main findings from this section are that small businesses accounted for around 90 per cent of employing businesses, yet they comprised only around one-third of employees and one-third of total operating profits before tax for employing businesses. While small businesses experienced the largest growth in industry value added between 2002–03 and 2005–06, wages and particularly profit growth per business was low relative to other employing businesses. Small businesses also experienced higher entry and exit rates and lower survival rates than their employing counterparts between June 2007 and June 2009.

4.1 Industry value added, employment, wages and profits

This section looks at the counts of businesses, industry value added, employment, wages and profits across small, medium and large businesses.

In June 2009, there were 731 055 small businesses, accounting for around 90 per cent of employing businesses. The remaining businesses were mostly medium businesses (83 399 businesses), while large businesses accounted for less than 1 per cent of employing businesses (6349 businesses) (Figure 4.1).

Figure 4.1: Proportion of employing businesses by size, June 2009

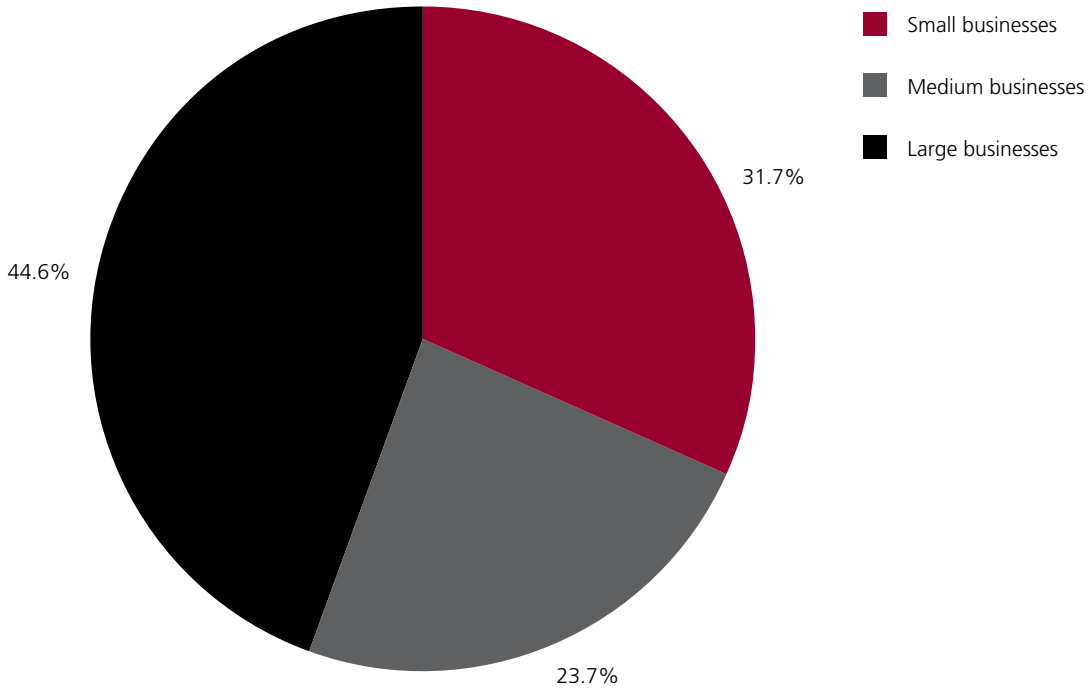


Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.
Source: ABS, *Counts of Australian Businesses, Including Entries and Exits,* June 2007 to June 2009, Catalogue No. 8165.0.

In this section the ABS Australian Industry survey can be used to analyse the relative contributions of small, medium and large businesses in terms of industry value added, employment, wages and profits. From 2006–07, the ABS has grouped non-employing businesses with businesses employing 20 or fewer in its Australian Industry survey. As data have shown that characteristics of employing small businesses and non-employing businesses are very different[18], this analysis will focus on statistics between 2002–03 and 2005–06.[19]

Industry value added is a measure of the contribution of businesses in a selected industry to gross domestic product and reflects the relative size of an industry. Small businesses had the second largest contribution to industry value added, accounting for 31.7 per cent of total industry value added in 2005–06, with large businesses contributing the largest proportion (44.6 per cent) (Figure 4.2).

Figure 4.2: Proportion of industry value added for employing businesses by size, 2005–06



Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.
Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Between 2002–03 and 2005–06, small businesses experienced the largest growth in industry value added of employing businesses, followed by large and medium businesses (Table 4.1).

18 For example, non-employing businesses have significantly higher entry and exit rates and lower survival rates than employing businesses (ABS, *Counts of Australian Businesses, Including Entries and Exits*, June 2007 to June 2009, Catalogue No. 8165.0).
19 These data are classified according to the 1993 Australian and New Zealand Standard Industrial Classification (ANZSIC) structure.

Table 4.1: Industry value added by size, 2002–03 and 2005–06

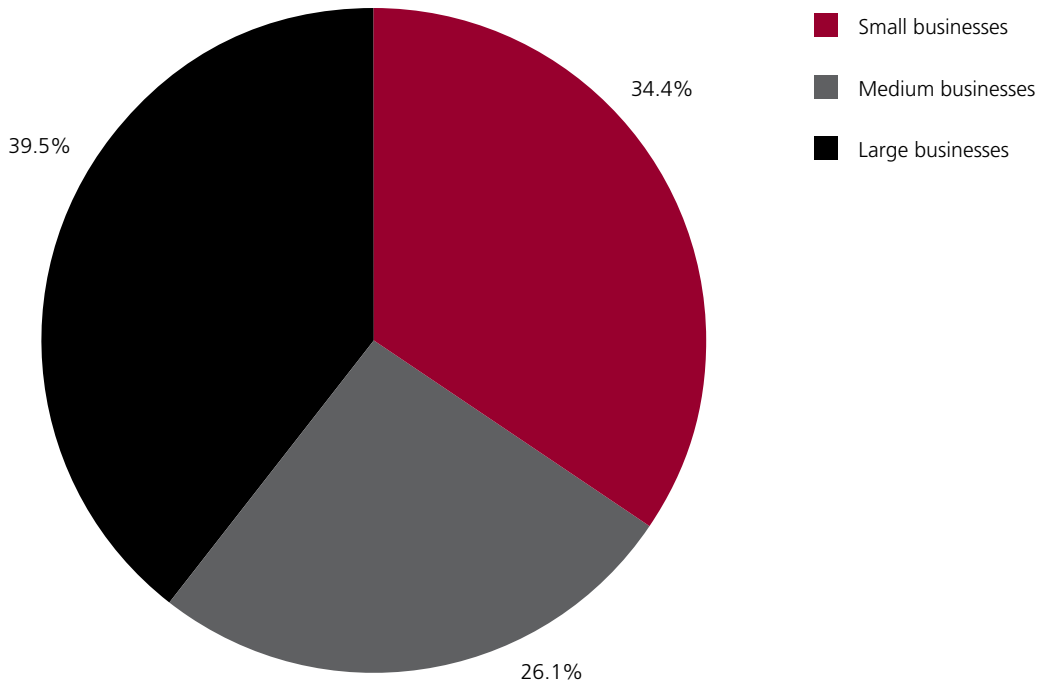
	2002–03	2003–04	2004–05	2005–06	Growth between 2002–03 and 2005–06
	$m	$m	$m	$m	%
Small businesses	138 195	160 468	170 878	186 981	35.3
Medium businesses	114 768	118 495	127 290	139 632	21.7
Large businesses	201 339	210 907	236 754	263 404	30.8

Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees. All figures are nominal values.

Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

In 2005–06, while small businesses accounted for around 90 per cent of employing businesses, these businesses employed only around one third of employees (2 395 381) in employing businesses, which was fewer than the numbers employed in large businesses (2 748 609) but more than medium businesses (1 820 640) (Figure 4.3).

Figure 4.3: Proportion of employment for employing businesses by size, 2005–06



Note: Employment includes working proprietors. Small business employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.

Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Employees in small businesses were mainly located in the Retail trade, Property and business services and Construction industries, which accounted for 46.7 per cent of employment in small businesses in 2005–06. It was a similar composition for employees in medium and large businesses, with these employees working mainly in the Retail trade and Property and business services industries. However, in contrast to small businesses, employees in medium and large businesses tended to work in Manufacturing rather than Construction (Table 4.2).

Table 4.2: Employment by size and industry, 2005–06

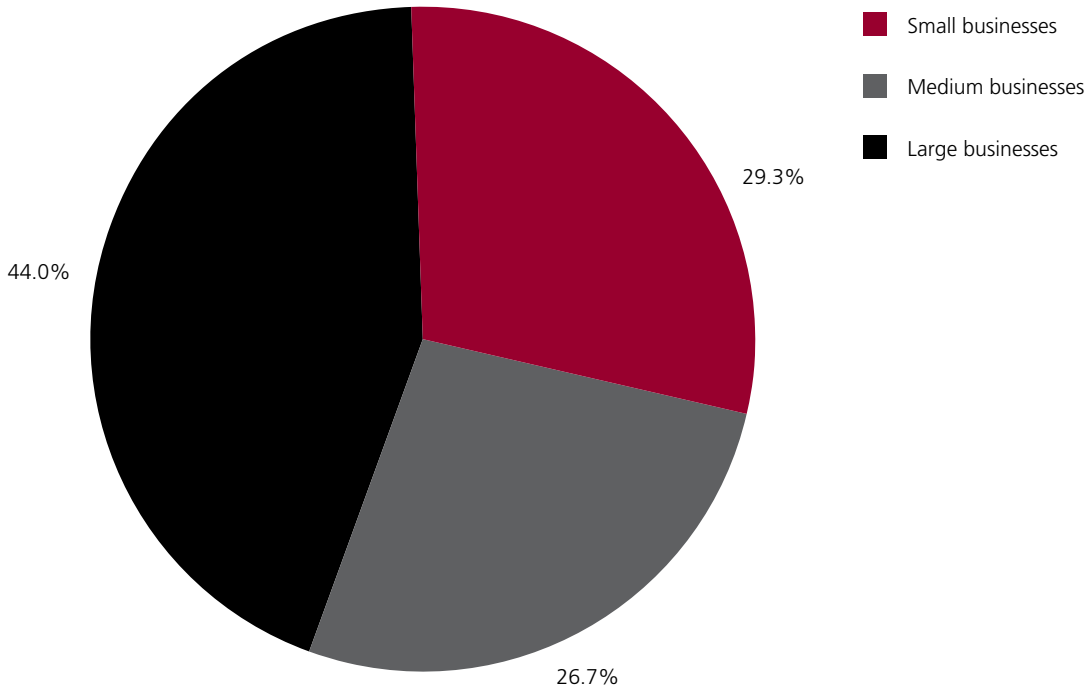
	Small	%	Medium	%	Large	%
Agriculture, forestry and fishing	190 989	8.0	46 422	2.5	12 279	0.4
Mining	11 136	0.5	20 309	1.1	76 233	2.8
Manufacturing	242 598	10.1	325 982	17.9	434 479	15.8
Electricity, gas and water supply	2784	0.1	9828	0.5	52 946	1.9
Construction	260 754	10.9	120 636	6.6	85 730	3.1
Wholesale trade	140 963	5.9	137 106	7.5	160 157	5.8
Retail trade	431 169	18.0	238 210	13.1	586 384	21.3
Accommodation, cafes and restaurants	154 776	6.5	172 295	9.5	103 946	3.8
Transport and storage	83 060	3.5	76 647	4.2	181 273	6.6
Communication services	11 496	0.5	7838	0.4	97 630	3.6
Property and business services	427 792	17.9	263 695	14.5	468 439	17.0
Education	31 906	1.3	135 267	7.4	79 563	2.9
Health and community services	234 626	9.8	165 435	9.1	291 329	10.6
Cultural and recreational services	54 966	2.3	39 166	2.2	75 626	2.8
Personal and other services	116 368	4.9	61 803	3.4	42 595	1.5
All industries	2 395 383	100.0	1 820 639	100.0	2 748 609	100.0

Note: The Australian Industry survey uses the ANZSIC 1993 industry coding. Employment includes working proprietors. Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.

Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Looking at wages and salaries for employing businesses, small businesses accounted for around 30 per cent of wages and salaries across employing businesses, compared with 26.7 and 44.0 per cent for medium and large businesses, respectively (Figure 4.4).

Figure 4.4: Proportion of wages and salaries for employing businesses by size, 2005–06



Note: Wages and salaries include capitalised wages and salaries but exclude the drawings of working proprietors. Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.

Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Trends in average wages and salaries per business between 2002–03 and 2005–06 show that average wages growth per business in small and large businesses were broadly similar (22.5 and 19.9 per cent, respectively), while medium businesses had the highest average growth in wages and salaries per business (Table 4.3).

Table 4.3: Average wages and salaries per employing business by size, 2002–03 and 2005–06

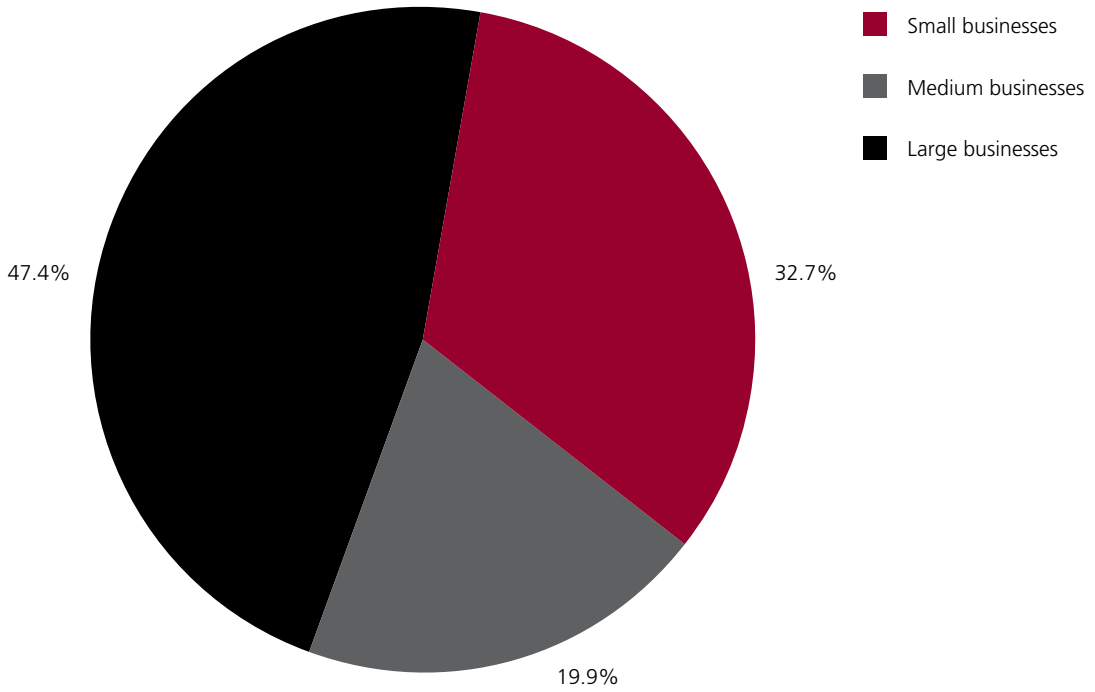
	2002–03	2003–04	2004–05	2005–06	Growth between 2002–03 and 2005–06
	$'000	$'000	$'000	$'000	%
Small businesses	92.5	103.0	105.7	113.3	22.5
Medium businesses	1630.1	1922.9	2019.1	2122.6	30.2
Large businesses	36 063.6	38 890.4	40 677.6	43 247.1	19.9

Note: Wages and salaries include capitalised wages and salaries but exclude the drawings of working proprietors. Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.

Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Focusing on profitability measures across employing businesses, small businesses accounted for around a third of operating profit before tax across employing businesses, while large businesses accounted for the largest proportion of operating profit before tax (47.4 per cent) (Figure 4.5).

Figure 4.5: Proportion of operating profit before tax for employing businesses by size, 2005–06



Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.
Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

Between 2002–03 and 2005–06, growth in average operating profit before tax per business was the lowest for small businesses (30.5 per cent), increasing at less than half the rate of medium and large businesses (75.1 and 61.8 per cent, respectively) (Table 4.4). It is interesting to note that profit growth in small businesses was particularly low relative to the wages growth in small businesses.

Table 4.4: Average operating profit before tax per business by size, 2002–03 and 2005–06

	2002–03	2003–04	2004–05	2005–06	Growth between 2002–03 and 2005–06
	$'000	$'000	$'000	$'000	%
Small businesses	54 231.6	56 047.9	60 797.6	70 784.8	30.5
Medium businesses	505 152.2	749 167.8	703 146.2	884 754.0	75.1
Large businesses	16 086 814.4	21 547 699.2	22 573 696.9	26 030 402.1	61.8

Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.
Source: ABS, *Australian Industry,* 2005–06, Catalogue No. 8155.0.

In summary, while around 90 per cent of employing businesses were small businesses, these businesses accounted only for around one third of employees and total operating profits before tax for employing businesses. While small businesses experienced the largest growth in industry value added between 2002–03 and 2005–06, wages and, in particular, profit growth per business was low relative to other employing businesses.

4.2 Business entry, exit and survival rates

This section looks at business entry, exit and survival across small, medium and large businesses.

Entry and exit rates[20] can gauge the ease at which businesses enter and exit and may also measure the level of competition within an industry. It is important to note that business exits are not necessarily business failures. An Australian study by Bickerdyke et al. (2000) found that businesses can exit in two ways:

- through changes in ownership (temporary exits), which account for 20 per cent of business exits; and
- the remaining 80 per cent of exits come from cessations (permanent exits), which represent 'real' deaths and occur when businesses cease operations. The majority of these cessations are from solvent businesses exiting for non-financial and 'lifestyle' reasons, such as retirement.

However, Bickerdyke et al. (2000) also noted that some cessations are caused by business failures. They found that most business failures are solvent failures, which are businesses that have ceased operations to avoid making further losses, but without owing debts. Insolvent failures, which are businesses that have ceased operations because of bankruptcy or liquidation[21], represent only around one in five business failures. The paper found that in 1999–2000 the economy-wide business failure rate was estimated to be around 3.6 failures per 1000 enterprises (0.36 per cent).[22] Nonetheless, they found that the employment impacts of business solvencies were relatively modest, with job losses resulting from bankruptcies and liquidations in 1999–2000 estimated to have accounted for less than 1 per cent of total job losses in that year.

Looking at entry and exit rates of employing businesses by firm size between 2007–08 and 2008–09, the data show that small businesses have higher entry and exit rates (12.0 and 9.7 per cent in 2008–09, respectively) compared with medium and large businesses. Entry and exit rates remained broadly similar for small businesses over the period (Table 4.5).

20 A business entry is a business that has newly registered for an ABN and has a GST role allocated, while a business exit is a business that has cancelled its ABN or GST role, or has ceased to remit GST for at least five consecutive quarters. Entry rates are business entries in the financial year as a proportion of total businesses operating at the start of the financial year, while exit rates are total business exits in the financial year as a proportion of total businesses operating at the start of the financial year.

21 Liquidation data are used to measure insolvent business failure in incorporated businesses, while business-related bankruptcies are used for unincorporated businesses.

22 This was approximately one-third of the rate in 1991–92, when the comparable figure was 10.4 failures per 1000 enterprises (1.04 per cent).

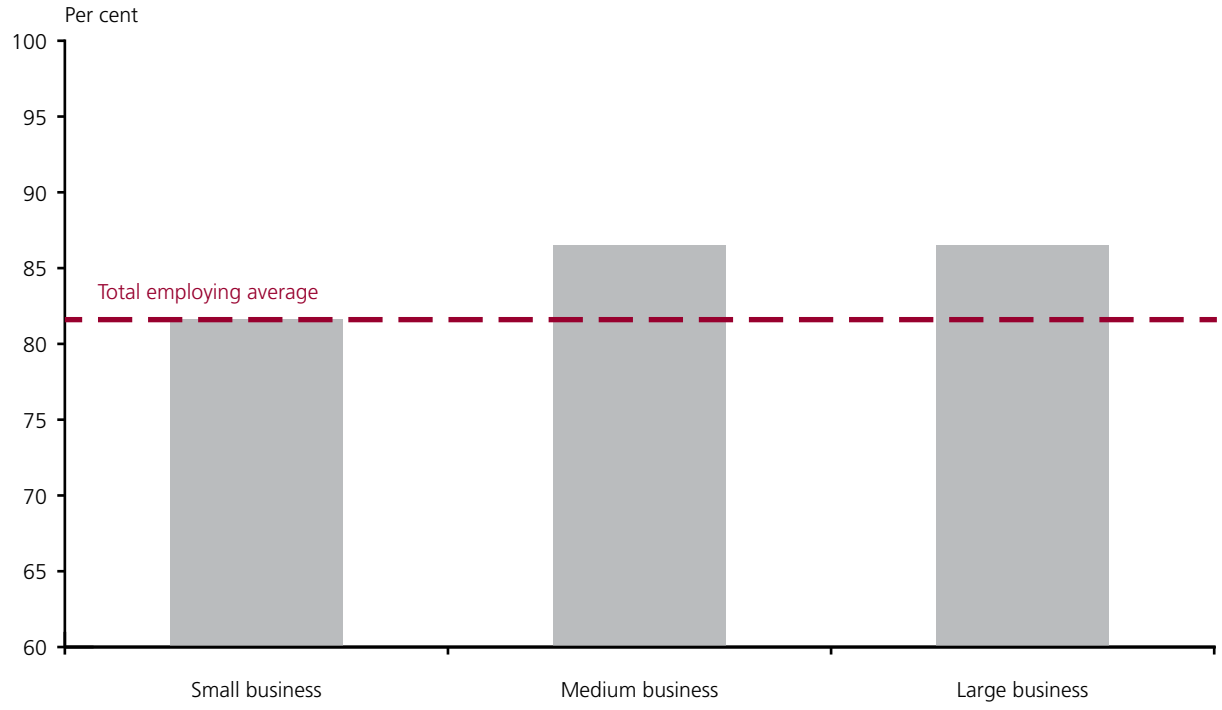
Table 4.5: Entry and exit rates of employing businesses by size, 2007–08 and 2008–09

	2007–08		2008–09	
	Entry rate	Exit rate	Entry rate	Exit rate
	%	%	%	%
Small businesses	12.8	9.6	12.0	9.7
Medium businesses	4.0	6.0	4.0	7.1
Large businesses	7.3	6.1	8.4	7.6
All employing businesses	**11.9**	**9.2**	**11.2**	**9.4**

Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees.
Source: ABS, *Counts of Australian Businesses, Including Entries and Exits,* June 2007 to June 2009, Catalogue No. 8165.0.

Survival rates[23] for small businesses were lower than for medium and large businesses, with 81.6 per cent of small businesses surviving between June 2007 and June 2009 compared with 86.5 per cent for medium and large businesses (Figure 4.6).

Figure 4.6: Survival rates of employing businesses by size, June 2007 to June 2009

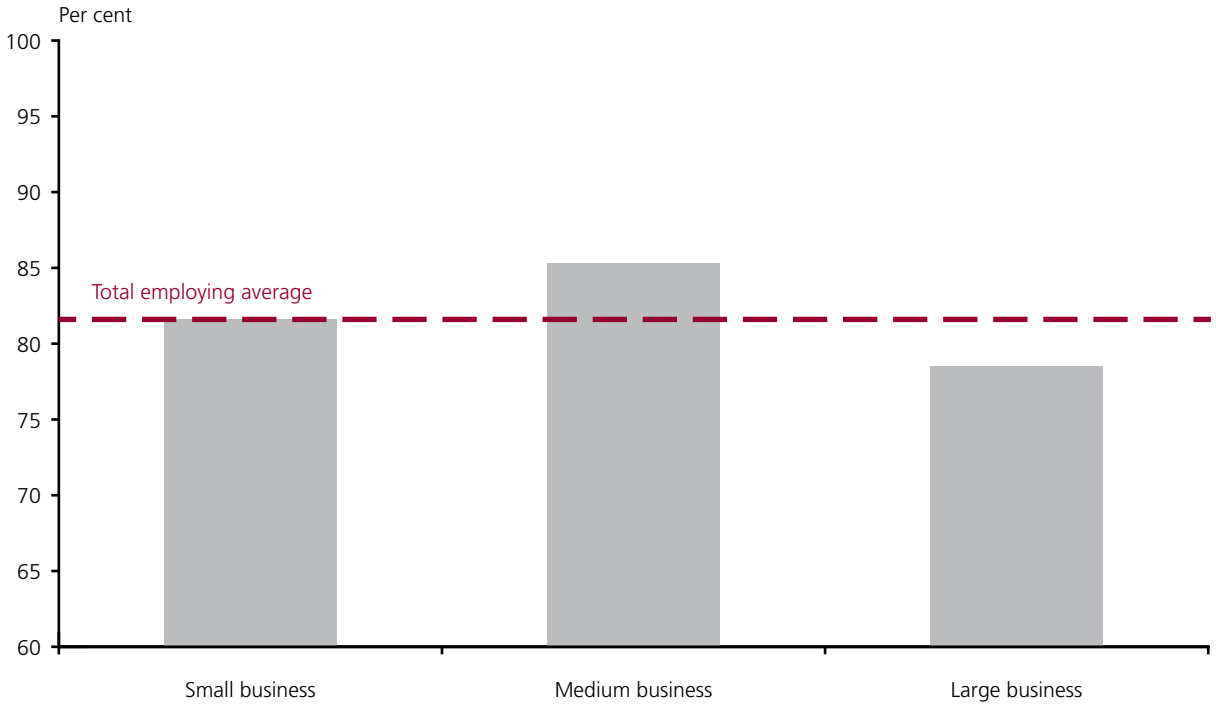


Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees. Total employing average is the average survival rate for all employing businesses.
Source: ABS, *Counts of Australian Businesses, Including Entries and Exits,* June 2007 to June 2009, Catalogue No. 8165.0.

23 A surviving business is defined in this case as a business which was actively trading in June 2007 and continued to be trading in June 2009.

Survival rates for small business entries were very similar to the survival rates for small businesses. However, survival rates for small business entries were higher than survival rates for large business entries (Figure 4.7).

Figure 4.7: Survival rates of employing business entries by size, June 2007 to June 2009



Note: Small businesses employ 1 to 19 employees, medium businesses employ 20 to 199 employees and large businesses employ 200 or more employees. Total employing average is the average survival rate for all employing business entries.

Source: ABS, *Counts of Australian Businesses, Including Entries and Exits,* June 2007 to June 2009, Catalogue No. 8165.0.

In summary, small businesses experienced higher entry and exit rates and lower survival rates than medium and large businesses between June 2007 and June 2009.

4.3 Conclusion

This chapter reviewed the characteristics of small businesses in Australia, and found that:

- while around 90 per cent of employing businesses were small businesses, these businesses accounted for only around one third of employees and one-third of total operating profits before tax for employing businesses;
- trends between 2002–03 and 2005–06 show that while small businesses experienced the largest growth in industry value added, wages and, in particular, profit growth per business was low relative to other employing businesses; and
- small businesses exhibited higher entry and exit rates and lower survival rates than their employing medium and large business counterparts between June 2007 and June 2009.

5 Analysis of small businesses using the Business Longitudinal Database

In this chapter, the ABS BLD is used to analyse differences across small businesses that utilise different employment arrangements, including differences in productivity, profitability, level of competition and business survival rates. Movements between employment arrangements across small businesses are also analysed. Small businesses are defined in the BLD as businesses (represented by ABNs) that employ fewer than 20 employees and do not include non-employing businesses. While the BLD collects data on small and medium businesses, the majority of the analysis will focus on small businesses, as small sample sizes prevent a detailed analysis of medium businesses by pay-setting arrangements.

The main points that emerge throughout this chapter are that:

- small award-reliant only businesses accounted for 12.9 per cent of small employing businesses in 2005–06;
- small award-reliant only businesses were less likely to have experienced increased productivity and profitability;
- small award-reliant only businesses exhibited lower survival rates relative to small businesses that used non-award arrangements and businesses that utilised a combination of both; and
- the majority of small award-reliant businesses tended to move towards using non-awards or a combination of both over time.

The BLD is a longitudinal dataset that contains business characteristics and financial data and allows for analysis on the performance of small businesses across employment arrangements.

For the purposes of ensuring consistency, this chapter examines various measures across both panels.[24] The sample size analysed in this chapter is slightly reduced from the total employing business numbers mentioned in Chapter 3, as approximately 80 and 90 per cent of businesses responded to the employment arrangements question in panel 1 and 2, respectively.[25]

The BLD has tracked the employment arrangements of businesses by asking businesses to identify how many employees were covered by the following employment arrangements:

- awards (paid at the award rate);
- over-awards (paid above the award rate), individual agreement or individual contracts and informal individual agreements;
- collective/enterprise agreements, including enterprise, workplace, industry, site or project collective agreements that set pay, enterprise bargaining agreements or certified agreements and unregistered or verbal collective agreements;
- working proprietors, partners or directors; and
- other.

24 The ABS has advised in informal communications that statistics should not be derived from pooling the two panels together, as the pooled sample is not representative of the business population.

25 Overall non-response rates are low for the BLD, ranging from 2 to 5 per cent of the sample.

Although the survey instrument collected data on the number of workers covered across employment arrangements, the data are presented as three binary variables. The question in the BLD 'data item list' is 'Which of the following pay-setting arrangements were used by this business during the last day period ending in June (tick all that apply)', with the responses being:

- award: Yes/No;
- individual agreement: Yes/No; and
- other: Yes/No.

From this variable, the 'employment arrangements' variable used in the data analysis in this chapter is generated by creating three alternative groups that capture:

- awards—only award rates of pay (12.9 per cent of employing firms in 2005–06);
- non-awards—individual contracts, enterprise bargaining agreements, individuals hired as working proprietors, partners or salaried directors and other agreements (56.8 per cent of employing firms in 2005–06); and
- combination of award and non-award arrangements—a firm may use both award rates of pay and non-award arrangements (30.3 per cent of employing firms in 2005–06).[26]

The business population in Australia changes over time due to business entries, business deaths and businesses that undergo structural change.

In light of this, the BLD flags business deaths by ABNs that cease to operate during the life of the panel. Once a business death occurs, the business remains in the sample and is appropriately flagged. Businesses that undergo structural change (eg. mergers, takeovers, business splits, or a combination of these) are treated in the BLD as follows:

- if the structural change does not change the original ABN, then the business will remain in the sample and the change will not be flagged; or
- if the structural change changes the original ABN, then the business is treated as a death.

As most variables of interest are available only from 2005–06 onwards, figures from 2004–05 are not presented for panel 1.

5.1 Characteristics of small businesses by employment arrangements

This section looks at the industry structure and employment characteristics of small businesses that utilise different employment arrangements. By business size, around 95 per cent of businesses in the BLD (which excludes large businesses) across all employment arrangements were small businesses. Businesses that utilised non-award arrangements had a slightly higher proportion of small businesses than other pay-setting categories (Table 5.1).

26 Figures on the proportions of firms that use award, non-award or a combination of both are extracted from panel 2, which is designed to be representative of the Australian business population in 2005–06. In panel 2, sample sizes for small award-reliant only businesses, businesses that used non-award arrangements and businesses that used a combination of both were 264, 1166 and 623 businesses, respectively. Sample sizes for panel 1 across these employment arrangement categories were 217, 997 and 498 businesses, respectively.

Table 5.1: Business size within employment arrangement groupings 2005–06, panel 2

	Award only	Combination	Non-award
	%	%	%
Small businesses	96.5	94.1	97.1
Medium businesses	3.5	5.9	2.9
Total	100.0	100.0	100.0

Note: Small businesses employ 1 to 19 employees and medium businesses employ 20 to 199 employees. The BLD excludes large businesses (businesses that employ 200 or more employees).

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

Over half of small businesses utilised only non-award arrangements (57.4 per cent), followed by businesses that used a combination of award and non-award arrangements (29.7 per cent) and award-reliant only businesses (12.9 per cent). This is in contrast to medium businesses, where there were more businesses that utilised a combination of award and non-award arrangements (Table 5.2).

Table 5.2: Business size across employment arrangement groupings 2005–06, panel 2

	Award only	Combination	Non-award	Total
	%	%	%	%
Small businesses	12.9	29.7	57.4	100.0
Medium businesses	11.5	46.1	42.4	100.0
Total	12.9	30.3	56.8	100.0

Note: Small businesses employ 1 to 19 employees and medium businesses employ 20 to 199 employees. The BLD excludes large businesses (businesses that employ 200 or more employees).

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

Focusing on the industry structure within the employment arrangements groupings for small businesses, the data show that the majority of award-reliant only small businesses operated within the Construction, Agriculture, forestry and fishing and Retail trade sectors. This structure was similar for firms that employed a combination of award and non-award arrangements, although it represented a smaller proportion of businesses in Agriculture, forestry and fishing, and a higher proportion of businesses in Retail trade and Construction. For businesses that used non-award employment arrangements, most small firms operated within Property and business services, Construction and Retail trade (Table 5.3). Across all types of employment arrangements, many small businesses operated within the Retail trade and Construction sectors. Since the industry structure is somewhat similar across all employment arrangement groups, this suggests that the analysis in sections 5.2 and 5.3 is not driven by differences in industry structure.

Table 5.3: Industry structure of small businesses within employment arrangements 2005–06, panel 2

	Award only	Combination	Non-award	Total
	%	%	%	%
Agriculture, forestry and fishing	17.2	4.5	9.2	9.0
Mining	0.3	0.2	0.4	0.3
Manufacturing	4.3	9.5	7.3	7.5
Construction	17.5	20.7	16.8	17.9
Wholesale trade	3.3	7.0	7.0	6.5
Retail trade	22.6	26.2	13.5	18.1
Accommodation, cafes and restaurants	9.7	7.8	3.0	5.1
Transport and storage	3.4	4.7	5.8	5.2
Communication services	0.8	1.5	1.2	1.2
Property and business services	12.0	8.9	31.0	22.5
Cultural and recreational services	2.8	2.4	2.5	2.5
Personal services	6.3	6.8	2.4	4.1
Total	100.0	100.0	100.0	100.0

Note: The BLD uses the ANZSIC 1993 industry coding and excludes the following industries: Electricity, gas and water supply, Finance and insurance, Government administration and defence, Education, Health and community services and Other services. The data are drawn from Panel 2, as it is representative of the business population in 2005–06.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

While most small businesses across all types of employment arrangements did not hire temporary or seasonal workers[27], award-reliant only small businesses had a higher proportion of businesses that hired temporary or seasonal workers, compared with businesses that used non-awards and businesses that utilised a combination of both (Table 5.4).

Table 5.4: Temporary or seasonal workers of small businesses by employment arrangement 2005–06, panel 2

	Award only	Combination	Non-award
	%	%	%
No	71.9	82.0	83.8
Yes	28.1	18.0	16.2
	100.0	100.0	100.0

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

27 Temporary or seasonal jobs are those that existed for less than six months of the year to deal with peaks in workload. This excludes jobs held by casuals on an ongoing basis throughout the year.

The BLD also has data on casual[28] and full-time employment but they are not a strong feature of the BLD, as these employment variables are categorical and limit detailed analysis. Furthermore, it is not clear from these categorical variables whether these firms do indeed hire any casuals or full-time workers. For instance, the categories for the employment of casuals are 0–4 casuals, or 5 or more casuals. As a result, these variables are not presented.

In summary, across all employment arrangements, most small businesses were likely to operate within the Retail trade and Construction sectors and did not employ temporary or seasonal workers. Small award-reliant only businesses accounted for 12.9 per cent of small employing businesses.

However, some variations existed between small businesses with different types of employment arrangements, for example:

- award-reliant only small businesses were more likely to employ seasonal or temporary workers;
- small award-reliant only businesses had higher proportions operating in Agriculture, forestry and fishing; and
- businesses that utilised non-award arrangements were more likely to operate within Property and business services.

5.2 Movements between employment arrangements by small businesses

The BLD's longitudinal nature can be used to track changes in employment arrangement coverage across small businesses between 2004–05 and 2006–07.[29]

Around two-thirds of award-reliant only small businesses in 2004–05 transitioned to using non-awards or a combination of both in 2006–07, with only 37.6 per cent electing to pay only award rates in 2006–07. Half of small businesses that used a combination of employment arrangements in 2004–05 changed to paying only award rates or using non-award arrangements, with most changing to using only non-award arrangements. Around three-quarters of small businesses that used non-awards in 2004–05 remained on non-awards in 2006–07 (Table 5.5).

Table 5.5: Transition of small businesses from 2004–05 to 2006–07 by employment arrangements, panel 1

		2006–07			
		Award	Combination	Non-award	Total
		%	%	%	%
	Award	37.6	35.8	26.6	100.0
2004–05	Combination	15.3	50.0	34.7	100.0
	Non-award	9.7	16.4	73.9	100.0

Note: This table shows the transition of small businesses from 2004–05 to 2006–07 and is interpreted by looking at a small business category and reading across. For example, for businesses that used a combination of award and non-award arrangements in 2004–05, 15.3 per cent transitioned to paying award rates only, 34.7 per cent transitioned to non-award arrangements, while 50.0 per cent elected to remain using a combination of award and non-award arrangements.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

28 Casual workers are defined in the BLD as employees that usually receive a higher rate of pay to compensate for lack of permanency and leave entitlements.

29 Changes in employment arrangement coverage between 2004–05 and 2006–07 can be tracked only in panel 1.

As a result, of the small award-reliant only businesses in 2006–07, businesses that used non-awards and businesses that were covered by a combination of award and non-award arrangements in 2004–05 together accounted for the majority of these businesses, with businesses that used only award rates in 2004–05 accounting for 43 per cent of the group. It is a similar story for small businesses that were covered by a combination of employment arrangements in 2006–07, with award-reliant only businesses and businesses that used non-awards in 2004–05 accounting for the majority of the group. However, small businesses that used non-awards in 2006–07 mainly consisted of businesses that used non-awards in 2004–05, followed by businesses that used a combination of award and non-award and award-reliant only businesses in 2004–05 (Table 5.6).

Table 5.6: Composition of small businesses in 2006–07 by employment arrangements, panel 1

		2006–07		
		Award	Combination	Non-award
		%	%	%
	Award	43.0	24.2	8.6
2004–05	Combination	20.5	39.5	13.1
	Non-award	36.4	36.3	78.3
	Total	100.0	100.0	100.0

Note: This table shows the composition of small businesses in 2006–07 and is interpreted by looking at a small business category and reading down. For example, for businesses that used a combination of award and non-award arrangements in 2006–07, award-reliant only businesses in 2004–05 accounted for 24.2 per cent of these firms, businesses that used non-award arrangements in 2004–05 accounted for 36.3 per cent, while 39.5 per cent were businesses that used a combination of award and non-award arrangements in 2004–05.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

In summary, the majority of small award-reliant only businesses tended to move towards using non-awards or a combination of both over time.

5.3 Indicators of performance for small businesses

In this section, the performance of small businesses across employment arrangements is examined between 2005–06 and 2006–07. In this period, economic growth was robust, averaging 3.5 per cent per annum, the unemployment rate was low, averaging 4.7 per cent, and inflation for the most part remained within the Reserve Bank of Australia target band of 2 and 3 per cent, on average, over the cycle. Federal awards were increased once during this period. At 1 December 2006, all federal awards up to and including $700 per week were increased by $27.36 per week, while federal awards above $700 per week were increased by $22.04 per week. In percentage terms, this equated to a 5.7 per cent increase in the then Federal Minimum Wage, with the increase for higher award rates being lower.

The analysis is restricted to comparing small businesses by the method of setting pay groupings, as the BLD does not include large businesses. In addition, small sample sizes prevent a comparison of small businesses against medium businesses by method of setting pay, as medium businesses represent only around 5 per cent of the business population in the BLD. Further, most indicators of productivity, profitability and competition are subjective measures[30] in the BLD and should be considered only as proxies for these variables.

30 Productivity and profitability were measured in the BLD by asking survey respondents to assess their performance compared with the previous year and hence are not quantitative measures. Similarly, qualitative indicators of competition were obtained by asking survey respondents the number of competitors they face, the nature and size of their competitors, and their own market share.

Unfortunately, small sample size numbers in the BLD preclude a detailed multivariate analysis of firms by industry and employment arrangements. Hence, spurious correlations[31] may affect the analysis. For example, differences in productivity between employment arrangement groups may be due to the differences in industry composition. However, the characteristics of small businesses by different employment arrangements appear to be somewhat similar as shown in Section 5.1, with comparable industry structures. The data suggest that any effect due to industry differences on the analysis should be minimal since their influence across all employment arrangement categories would be similar, but this cannot be established conclusively.

5.3.1 Productivity and profitability

Productivity and profitability are key indicators of the performance of businesses. Productivity is the output of goods and services per unit of input and can measure the efficiency of a firm. Profitability is widely acknowledged to be a good indicator of the performance of businesses, as businesses performing poorly would lead to lower profitability relative to businesses performing well.

Productivity and profitability were measured in the BLD by asking survey respondents to assess their performance compared with the previous year. Specifically, respondents were asked whether productivity and profitability had decreased, stayed the same, or increased. As a result, these measures exclude business entrants, as they are available only for businesses that have been operating for more than a year.

Most small businesses reported no changes in productivity for 2005–06 and 2006–07. Small award-reliant only businesses were more likely to report decreased or stable productivity for these years compared with small businesses that used non-awards or a combination of both. Trends between 2005–06 and 2006–07 showed that small businesses that used non-award arrangements and a combination of both experienced higher proportions of increased productivity in 2006–07 compared with 2005–06, In contrast, small award-reliant businesses exhibited higher instances of increased productivity in 2005–06 compared with 2006–07 (Table 5.7).

Table 5.7: Changes in productivity from previous year

		2005–06			2006–07		
		Decreased	Stayed the same	Increased	Decreased	Stayed the same	Increased
		%	%	%	%	%	%
	Award only	12.6	63.7	23.7	19.4	53.9	26.7
Panel 1	Combination	21.2	43.4	35.3	20.7	49.2	30.1
	Non-award	17.3	51.1	31.6	19.9	51.4	28.8
	Award only	31.9	50.9	17.1	20.3	39.3	40.4
Panel 2	Combination	12.9	48.1	39.0	17.4	48.5	34.1
	Non-award	19.2	38.3	42.4	18.9	49.2	31.9

Note: Not applicable and missing responses are omitted.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

31 Spurious correlations are relationships that have no direct causal connection.

Small award-reliant only businesses also had a higher proportion of businesses reporting decreased or stable profitability for most instances in 2005–06 and 2006–07 compared with small businesses that utilised non-awards or a combination of both. Focusing on the changes across time, higher proportions of small businesses across all employment arrangements reported a decrease in profitability between 2005–06 and 2006–07 (Table 5.8).

Table 5.8: Changes in profitability from previous year

		2005–06			2006–07		
		Decreased	Stayed the same	Increased	Decreased	Stayed the same	Increased
		%	%	%	%	%	%
	Award only	29.7	46.9	23.4	39.4	41.7	18.9
Panel 1	Combination	31.2	33.0	35.9	33.7	35.3	31.0
	Non-award	29.9	35.4	34.7	33.8	38.0	28.2
	Award only	46.9	30.9	22.2	34.4	29.1	36.6
Panel 2	Combination	29.4	32.1	38.6	31.2	32.1	36.8
	Non-award	31.8	27.8	40.4	33.3	34.8	31.9

Note: Not applicable and missing responses are omitted.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

5.3.2 Competition

The level of competition faced by a business is a key determinant of its performance. Businesses that face high levels of competition would either be driven out of the market, or drive the business to innovate and increase efficiency.

The BLD contains a number of indicators that measure competition. One indicator is market structure, which is identified in the BLD by asking businesses the number of competitors they encountered. Four theoretical market structures are discussed in economic theory:

- monopoly—where one firm represents the industry;
- oligopoly—where a few firms represent the industry, with significant barriers to entry;
- perfect competition—where many firms represent the industry and sell the same products with no significant barriers to entry; and
- monopolistic competition—where many firms represent the industry, but sell similar yet differentiated products with no significant barriers to entry.

Specifically in the BLD, businesses are asked whether they faced no effective competition (monopoly), one or two competitors (oligopoly), or three or more competitors (monopolistic competition). Three or more competitors could also be an example of perfect competition markets, however this is unlikely as it is more of a theoretical concept.

The majority of small businesses had three or more competitors for 2005–06 and 2006–07, suggesting a prevalence of monopolistic competition. Over this period, small businesses that used a combination of both types of pay setting arrangements were slightly more likely to have three or more competitors compared with their counterparts (Table 5.9).

Table 5.9: Number of competitors

		2005–06			2006–07		
		Captive market/ no effective competition	One or two competitors	Three or more	Captive market/ no effective competition	One or two competitors	Three or more
		%	%	%	%	%	%
	Award only	21.4	16.9	61.7	22.6	13.5	63.8
Panel 1	Combination	9.4	15.9	74.7	16.7	12.3	71.0
	Non-award	23.1	10.2	66.7	18.2	12.3	69.4
	Award only	23.3	6.3	70.3	11.2	17.6	71.2
Panel 2	Combination	9.8	12.7	77.5	14.1	13.8	72.1
	Non-award	20.3	8.6	71.2	18.5	11.3	70.2

Note: Missing responses are omitted.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

The BLD also contains qualitative data on the nature and size of a business's competitors. The nature of competitors is defined by the ABS as a business's similarities or differences in goods or services provided or activity undertaken. Similar in nature means that goods or services provided or activity undertaken are similar, while different in nature means that goods or services provided or the activity undertaken include similar goods, services or activities as part of a much wider (or smaller) range. The example of the 'nature of competitors' provided to business respondents is as follows: if two retailers are both selling clothing only, then they are similar in nature; however, if one sells clothing only while the other is a department store, then they are different in nature. It is expected that businesses that face only competitors of a similar nature would experience greater competition relative to businesses that compete only with businesses of a different nature, as they are competing in relation to the same goods and services.

In the BLD, the size of the competitor is determined by asking a business whether their competitor was relatively smaller, about the same size, or larger than their own business. Note that it is possible that a business may not face any competitors of a similar or different nature.

Competition for small businesses mainly stemmed from businesses that were similar in nature and of the same size or larger. However, a significant proportion of respondents also answered that they had larger competitors were of a different nature (Table 5.10 and 5.11).

Table 5.10: Nature and size of competitors, panel 1

	2005–06			2006–07		
	Award only	Combination	Non-award	Award only	Combination	Non-award
	%	%	%	%	%	%
Similar in nature						
Smaller	20.3	15.4	21.7	19.2	27.7	19.2
About the same size	50.5	52.7	47.8	51.9	57.1	56.4
Larger	49.8	49.6	58.4	46.4	53.8	61.0
None	0.0	3.1	2.9	1.6	0.3	1.3
Different in nature						
Smaller	5.0	3.0	6.7	9.8	5.5	6.6
About the same size	22.1	16.3	11.4	8.3	6.9	15.9
Larger	43.9	28.3	37.4	16.7	25.8	39.7
None	13.0	15.1	11.7	7.4	17.5	16.2

Note: Missing responses are omitted. These figures do not sum to 100 and should be interpreted as follows: 20.3 per cent of small award-reliant only businesses had smaller competitors that were similar in nature, while 79.7 per cent of small award-reliant only businesses did not.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

Table 5.11: Nature and size of competitors, panel 2

	2005–06			2006–07		
	Award only	Combination	Non-award	Award only	Combination	Non-award
	%	%	%	%	%	%
Similar in nature						
Smaller	13.4	22.4	18.7	20.9	25.3	17.1
About the same size	59.7	57.5	59.3	49.6	77.3	58.4
Larger	45.3	52.0	55.5	51.7	45.0	54.0
None	0.0	0.3	0.8	1.4	0.0	1.0
Different in nature						
Smaller	3.7	10.3	2.9	7.1	6.2	6.0
About the same size	11.9	14.8	13.2	14.7	20.3	13.1
Larger	20.4	35.4	36.5	32.6	28.0	41.1
None	12.7	12.9	15.5	12.3	10.6	17.0

Note: Missing responses are omitted. These figures do not sum to 100 and should be interpreted as follows: 13.4 per cent of small award-reliant only businesses had smaller competitors that were similar in nature, while 76.6 per cent of small award-reliant only businesses did not.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

The BLD also contains measures of market share. As a business improves its performance, its market share will ultimately increase. Hence, it is an indicator of business performance relative to its competitors. The BLD identifies market share by asking each business to categorise whether it accounts for:

- less than 10 per cent of the market;
- 10 per cent to 50 per cent of the market; and
- greater than 50 per cent of the market.

Across all employment arrangements, most small businesses were likely to constitute less than 10 per cent of the market share between 2005–06 and 2006–07. This was most common among small businesses covered by non-award agreements, followed by small award-reliant only businesses (Table 5.12).

Table 5.12: Market share

		2005–06			2006–07		
		Less than 10 per cent	10 per cent to less than 50 per cent	Greater than 50 per cent	Less than 10 per cent	10 per cent to less than 50 per cent	Greater than 50 per cent
		%	%	%	%	%	%
	Award only	68.3	27.7	4.0	66.1	24.0	9.9
Panel 1	Combination	48.6	38.0	13.4	53.4	32.6	14.0
	Non-award	69.2	22.2	8.6	76.3	14.7	9.0
	Award only	58.2	29.8	12.0	57.3	36.6	6.1
Panel 2	Combination	57.3	28.2	14.5	57.7	34.2	8.2
	Non-award	76.3	18.7	5.0	76.3	16.8	6.9

Note: Missing responses are omitted.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

5.3.3 Business survival rates

Business survival rates highlight whether performance enables them to remain viable. Hence, survival rates are an indicator of business performance. Small business survival rates can be constructed by identifying a business by its type of employment arrangement in June 2005 and tracking its status in June 2007. It is important to remember that business deaths[32] are not necessarily business failures as businesses may exit for other reasons. As noted earlier in Section 4.2, Bickerdyke et al. (2000) found that 20 per cent of business deaths were due to changes in ownership. The remaining 80 per cent of exits came from cessations, which represent 'real' deaths and occur when businesses cease operations. The majority of these cessations were from solvent businesses exiting for non-financial and 'lifestyle' reasons, such as retirement. However, some of these cessations were due to business failure.[33] Around four-fifths of small award-reliant only businesses survived between June 2005

32 A death is when a business's ABN ceases to operate during the life of the panel.

33 Business failures cannot be quantified using the BLD.

and June 2007, which was lower than the survival rates for non-award small businesses and small businesses that used a combination of both types of arrangements. However, award-reliant only small businesses also had significantly smaller proportions that became dormant relative to small businesses in the other BLD pay-setting categories (Table 5.13).[34]

Table 5.13: Survival rates between June 2005 and June 2007, panel 1

	Award only	Combination	Non-award
	%	%	%
Survived	80.8	84.1	83.0
Death	18.9	10.9	12.5
Dormant	0.3	5.0	4.5

Note: A death is when a business's ABN ceases to operate during the life of the panel. A dormant unit is a business with a 'live' ABN but no longer operating in the market. A small number of businesses that did not provide a response and businesses that became out of scope of the survey are excluded.

Source: ABS, *Business Longitudinal Database, Expanded CURF*, 2005–06 and 2006–07, Catalogue No. 8168.0.55.001.

In summary, small award-reliant only businesses had lower proportions of businesses that experienced increased productivity and profitability and exhibited lower survival rates compared with small businesses that used non-award arrangements and a combination of award and non-award arrangements.

5.4 Conclusion

This chapter used the ABS BLD to analyse differences across small businesses that utilise different employment arrangements. The main findings in this chapter were:

- small award-reliant only businesses accounted for 12.9 per cent of small employing businesses in 2005–06;
- relative to small businesses that utilised non-award arrangements and a combination of award and non-award arrangements, small award-reliant only businesses were less likely to exhibit increased productivity and profitability in the period of analysis;
- small award-reliant only businesses also experienced lower survival rates relative to small businesses in the other BLD pay-setting categories;
- the majority of small award-reliant only businesses tended to move towards using non-awards or a combination of both over time; and
- the subjective nature of the productivity, profitability and competition measures in the BLD creates some uncertainty about the robustness of these findings; as the direction of causality remains ambiguous, these data only highlight associations between small award-reliant businesses and their indicators of performance.

34 Due to the survey design, it is not possible to construct survival rates between 2005 and 2007 for panel 2.

6 Analysis of employees working in small businesses

In the absence of rich firm level data, the characteristics of award-reliant employees working in small firms are analysed using the EEH and HILDA surveys. The purpose of this analysis is to examine the characteristics of award-reliant employees working in small firms and to assess if these employees are defined by a unique set of characteristics compared with other employees. Without quality firm-level data, the analysis of employee characteristics is also undertaken to determine if increases in award wages would be likely to affect award reliant workers in small firms differently to award-reliant workers in larger firms. While it is not possible to test this empirically, particularly by determining causality between worker type and the explanatory variables used to assess labour force characteristics, the analysis found that, in most cases, the characteristics of award-reliant workers employed in small firms were similar to award-reliant workers employed in larger firms. To the extent that these employee characteristics are determinants driving employer responses to adjustments in award wages, it is reasonable to assume from this observation that increases in award wages are unlikely to affect award-reliant workers in small firms very differently from award-reliant workers in larger firms, noting that employee characteristics are only one of a number of drivers of an employer response.

Throughout the chapter, two types of analysis are performed to determine the characteristics of employees working 'within' and 'across' different worker types. Analysis that looks 'within' these worker types examines the characteristics of employees grouped 'within' each worker type, while analysis that looks 'across' these worker types focuses on the percentages of workers distributed between different worker types. The worker types are defined as:

- small award-reliant—where an employee is covered by an 'award only' and works in a small firm which contains fewer than 20 employees;
- small non-award-reliant—where an employee is covered by a collective agreement or individual agreement and works in a small firm which contains fewer than 20 employees;
- larger award-reliant—where an employee is covered by an 'award only' and works in a larger firm which contains 20 or more employees; and
- larger non-award-reliant—where an employee is covered by a collective agreement or an individual agreement and works in a larger firm which contains 20 or more employees.

This chapter is structured as follows. Section 6.1 describes the surveys used to analyse employee characteristics. Section 6.2 looks at the general labour force characteristics of each worker type, while Section 6.3 focuses on their occupational composition. Section 6.4 reviews their industry profile and Section 6.5 looks at hourly wages. Section 6.6 examines other job and worker characteristics while Section 6.6 conducts a longitudinal analysis of job characteristics for the worker types. Section 6.7 provides concluding remarks.

6.1 Data surveys

This section draws on data derived from the EEH and HILDA surveys. The EEH is an employer-based survey conducted biennially. Micro data drawn from the May 2010 survey have been released in the form of a CURF and the data are analysed in this section. The CURF allows for a more in-depth analysis of explanatory variables.

The survey, conducted on a sample of employees from a sample of employers, is used to examine the characteristics of employers, such as industry and firm size; and their employees, such as sex, weekly earnings, occupation, employment type and method of setting pay. The analysis presented in this section classifies groups of employees by firm size and method of setting pay.

The HILDA survey is an annual household survey that provides information, among other things, on economic and labour market dynamics. It is a panel survey and data have thus far been collected from 2001 (Wave 1) onwards. The HILDA survey complements the analysis of different worker types by providing analysis on a range of job characteristics that the EEH data cannot. For instance, using the HILDA survey, worker characteristics such as 'union membership' and 'tenure with current employer' can be examined across different worker types. Furthermore, the longitudinal nature of the HILDA survey has the advantage of tracking the employment history and other job characteristics of individuals over time.

It should be noted that external events taking place around the timing of the surveys have the potential to have affected the results, although the nature and extent of these effects, if any, is not known. The survey waves in HILDA were undertaken during the second half of each year. For example, data for Wave 8, collected towards the end of 2008, would have been collected during the global economic downturn. In Australia, gross domestic product fell by 0.9 per cent in the December quarter 2008. Wave 9 was therefore collected following a period of economic uncertainty. Over the year to the December quarter 2009, gross domestic product increased by 2.7 per cent, up from an increase of 0.9 per cent over the year to the September quarter 2009. The unemployment rate increased from 4.1 per cent in August 2008 to 5.5 per cent in December 2009. In 2009, the Australian Fair Pay Commission awarded no increase to the FMW or award wages. Over the year to the December quarter 2010, gross domestic product increased by 2.7 per cent and the unemployment rate was 4.9 per cent in December 2010. In 2010 Fair Work Australia increased the NMW and award wages by $26 per week.

6.1.1 EEH survey

The EEH survey is currently the only ABS data source to provide information about employees' pay-setting methods. Employers are asked how the main part of an employee's pay is set. The ABS classifies the answers into one of the following categories: award only; collective agreement; or individual arrangement. In this instance, award-reliant employees are those employees assigned to the 'award only' category, while non-award-reliant employees are those employees assigned to either a 'collective agreement' or an 'individual arrangement'.

Employer size measures the size of the business in terms of the number of employees within that business. The employer size reflects the size of the business in a particular state or territory and not necessarily the size of the business Australia-wide. As one of the steps taken to preserve confidentiality in the 2010 EEH CURF, employer unit size was presented as two groups; fewer than 20 employees and 20 or more employees. Therefore, small firms are defined to be 'fewer than 20 employees' while 'larger firms' are '20 or more employees'. Hence, throughout the analysis, firms that employ 20 or more employees are defined as larger firms.

The sample used in this analysis has been constructed to better reflect the behaviour of private sector employees operating within small firms. Due to changes made for the EEH CURF 2010 to preserve confidentiality, the variable for 'sector' was omitted.[35] The inclusion of the industry variable at the one-digit level has been included in 2010, as a result the analysis excludes employees that work in the Public administration and safety industry, which is assumed to contain a high proportion of public service employees. The sample also excludes owner managers of incorporated enterprises. In addition, the sample was weighted to better represent the population.

As a result of changes made to the survey sample size, the proportion of award-reliant employees increased from 15.2 per cent in the EEH publication to around 17 per cent.

6.1.2 HILDA survey

The HILDA survey is a survey of Australian households conducted every year, beginning in 2001 (Wave 1). In 2008, the survey included a 'pay-setting' variable allowing the identification of award-reliant employees. Wave 9 is the focus of this analysis as it was the most recent wave available at the time of this study. HILDA defines award-reliant employees as those paid exactly the award (or Australian Pay and Classification Scales (APCS)) rate.

The HILDA survey asks a variety of questions pertaining to the labour force. HILDA's longitudinal aspect allows an analysis of trends over time, and in Section 6.7 an analysis of transitions between full-time and part-time employment, as well as between permanent/fixed-term and casual, is undertaken. The data obtained from the HILDA survey were weighted to better represent the population. Weighting the data ensures the sample is representative of the employee population.

Award-reliant workers are identified by responding 'Paid exactly the Award (or APCS) rate' to the question regarding how their pay is currently set. Other responses include a collective agreement, individual agreement, and a combination of collective and individual agreement.

Comparing the HILDA sample with the EEH sample indicated that the HILDA survey may overstate the proportion of award-reliant workers.[36] One reason could be that the HILDA survey asks employees, who are less likely to understand how their pay is set. The EEH survey asks employers, who are generally more informed as to how their employees' pay is set and about job characteristics. The HILDA survey was also found to overstate the number of workers in small firms compared with the EEH survey. One explanation for this could be that, for the HILDA data, the number of employees within the business was based, for sample size reasons, on location rather than the overall enterprise. For the EEH analysis, the number of employees was based across all locations of the business, within the state or territory. The HILDA data also incorporate employees in the Agriculture, forestry and fishing industry who are excluded in the EEH. Employees in this industry were more likely to be employed in small firms.

Similar to the EEH, public sector employees and non-employing firms were excluded from the sample as the analysis is focused on employing businesses. Excluding these groups leads to a higher estimated proportion of award-reliant employees than would otherwise have been the case as these workers are unlikely to receive award wages. After excluding these workers, the total number of respondents in the sample was 5123.

35 Sector categories are presented as Private sector and Public sector.
36 See Wilkins and Wooden (2011).

Table 6.1 shows the proportions of each worker type for both surveys. The table shows that the HILDA sample comprised higher proportions of award-reliant workers and both small and larger firms and non-award-reliant workers in small firms, while the EEH sample comprised a higher proportion of non-award-reliant workers in larger firms.

Table 6.1: Sample proportions of employees and firm type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
EEH 2010	7.7	18.3	9.2	64.7	100.0
HILDA 2009	14.5	25.6	15.1	44.8	100.0

Note: Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001; HILDA survey, Wave 9 (2009).

The findings of the HILDA analysis on the four worker types were similar to the EEH analysis. The analysis found more similarities between award-reliant workers employed in small firms and award-reliant workers employed in larger firms than with non-award-reliant workers employed in small firms. Though generally similar, the major differences between the HILDA and EEH findings in this report were in the occupation and industry analyses. Differences between employees due to the firm size of their employer were more evident in some job and worker characteristics. As a result of the similar findings, the HILDA results on labour force characteristics, occupation, industry and hourly wages are presented in Appendix 2 as a supplement to the EEH analysis.

6.2 Labour force characteristics

This section examines the general labour force characteristics of employees by focusing on sex, full-time and part-time status and employment type. The analysis looks at these characteristics of employees working 'within' and 'across' these worker types.

The analysis in this section finds that employees categorised by worker types differ less by firm size and more by award reliance status. The results show that award-reliant workers in both small and larger firms were more likely to be female, part-time and casual. In addition, award-reliant workers shared a similar composition of employment type. Non-award-reliant workers were more likely to be male, full-time and permanent or fixed-term.

Table 6.2 shows that almost 60 per cent of award-reliant workers in both small and larger firms were female compared with around 50 per cent for non-award-reliant workers in both small and larger firms. Around 60 per cent of award-reliant employees in both small and larger firms were part-time, compared with less than 40 per cent for non-award-reliant employees in both small and larger firms. Looking at full-time and part-time employment by sex, the table shows that most males worked full time, particularly non-award-reliant workers (almost 80 per cent for both small and larger firms), while most female employees worked part-time, particularly award-reliant employees (over 70 per cent for both small and larger firms).

Table 6.2: Proportion of employees within worker type by sex and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Sex					
Male	41.9	52.9	40.6	49.8	48.9
Female	58.1	47.1	59.4	50.2	51.1
Total	100.0	100.0	100.0	100.0	100.0
Full-time/part-time status					
Full-time	38.8	62.8	38.5	66.4	61.1
Part-time	61.2	37.2	61.5	33.6	38.9
Total	100.0	100.0	100.0	100.0	100.0
Male					
Full-time	55.2	78.7	51.2	80.1	76.0
Part-time	44.8	21.3	48.8	19.9	24.0
Total	100.0	100.0	100.0	100.0	100.0
Female					
Full-time	26.9	45.1	29.9	52.9	46.8
Part-time	73.1	54.9	70.1	47.1	53.2
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.3 looks at the distribution of male and female employment across worker types. The data show that a majority of males and females were non-award-reliant and employed in larger firms. The data also show that a higher percentage of non-award-reliant employees working in small firms were employed full time (19.0 per cent), compared with award-reliant employees working in small and larger firms (4.9 per cent and 5.8 per cent, respectively). However, part-time employment was distributed relatively evenly across the four worker types compared with full-time employment, for both males and females.

Table 6.3: Proportion of employees across worker type by sex and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Sex					
Male	6.6	19.8	7.7	65.9	100.0
Female	8.8	16.9	10.7	63.6	100.0
Full-time/part-time status					
Full-time	4.9	19.0	5.8	70.4	100.0
Part-time	12.2	17.5	14.6	55.8	100.0
Male					
Full-time	4.8	20.5	5.2	69.5	100.0
Part-time	12.4	17.6	15.6	54.6	100.0
Female					
Full-time	5.1	16.3	6.9	71.8	100.0
Part-time	12.1	17.4	14.1	56.3	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

An employee can be employed on a casual, permanent or fixed-term basis. Their conditions of employment vary according to their type of employment. Permanent employees are usually employed on an ongoing basis and are entitled to paid annual and sick leave. Fixed-term employees are employed for a specified period of employment and may be entitled to paid leave, whereas a casual employee usually receives a higher rate of pay, to compensate for lack of permanency and leave entitlements. Due to small observation numbers for fixed-term employees and somewhat similar employment conditions, permanent and fixed-term employees have been combined together for the analysis.

Between 2006 and 2010, the proportion of workers employed on a permanent or fixed-term basis slightly increased from 75.3 per cent to 77.0 per cent in 2010. However, the increase in workers employed on a permanent or fixed-term contract was only experienced within the group of award-reliant workers employed in small firms and was largely driven by changes in the composition of female employment. Compared with 2006 a greater proportion of female award-reliant workers in 2010 employed in small firms were permanent or fixed-term employees (from 44.6 per cent to 50.2 per cent) As a result, the proportions of casual and permanent or fixed-term employees who were award-reliant and worked in small firms were similar in 2010. In addition, over this same period, female casual employment increased only for non-award-reliant workers employed in small firms (from 25.5 per cent to 30.7 per cent) (see Appendix 1).

Table 6.4 shows that a majority of workers were employed on a permanent or fixed-term for all worker types. Looking at the data within each worker type, the data show that award-reliant employees working in small and larger firms shared a similar composition of employment type (around 54 per cent were permanent or fixed-term and around 46 per cent casual). Non-award-reliant employees working in small and larger firms had a higher percentage of permanent or fixed-term employees. While similar patterns emerged for the analysis by males and females, the data revealed that a higher proportion of females worked on a casual basis, particularly for workers in small firms.

Table 6.4: Proportion of employees within worker type by employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term	54.1	74.9	54.4	83.6	77.0
Casual	45.9	25.1	45.6	16.4	23.0
Total	100.0	100.0	100.0	100.0	100.0
Male					
Permanent/fixed-term	59.4	79.9	56.9	84.3	79.6
Casual	40.6	20.1	43.1	15.8	20.4
Total	100.0	100.0	100.0	100.0	100.0
Female					
Permanent/fixed-term	50.2	69.3	52.8	83.0	74.5
Casual	49.8	30.7	47.3	17.1	25.5
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.5 looks at the proportion of employees by employment type across different worker types. The table shows that the distribution of casuals was relatively more even than for permanent or fixed-term workers. Similar percentages were also recorded for female award-reliant employees working on a casual basis in small and larger firms at 17.2 per cent and 19.9 per cent, respectively.

In addition, the distribution of employees across different worker types show that the percentages of casual and permanent or fixed-term employees who were non-award-reliant and employed in small firms were similar, particularly for males at 19.9 per cent and 19.6 per cent, respectively.

Table 6.5: Proportion of employees across worker type by employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term	5.4	17.8	6.5	70.2	100.0
Casual	15.5	20.0	18.3	46.2	100.0
Male					
Permanent/fixed-term	5.0	19.9	5.5	69.7	100.0
Casual	13.2	19.6	16.2	51.0	100.0
Female					
Permanent/fixed-term	5.9	15.7	7.6	70.8	100.0
Casual	17.2	20.3	19.9	42.6	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

One difference between EEH and HILDA is the definition of permanent or ongoing, fixed-term and casual workers. HILDA asks respondents which of these three employment arrangements applies to them. The EEH survey uses the ABS definition of a permanent employee being a worker who has access to paid holiday and sick leave. Table A2.3 in Appendix 2 presents these employment arrangements using the HILDA definition and also compares them with the ABS definition, which is derived in the HILDA survey.

The data suggest that employment type is more likely to be associated with award reliance than with firm size. However, the data illustrated that while a relatively large proportion of casual employees were found 'within' award-reliant worker types, their distribution 'across' worker types showed similar proportions of casual employees found to be non-award-reliant and employed in small firms as well as award-reliant and employed in both small and larger firms.

6.3 Occupation

This section looks at the occupational composition of employees that have been categorised by the four 'worker types', by focusing on sex, full-time and part-time status and employment type. The analysis looks at the proportions of employees working in the ABS's Australian and New Zealand Standard Classification of Occupations (ANZSCO) 'within' and 'across' the different worker types. The occupation analysis found that occupational composition is more likely to be associated with award reliance than with firm size.

The data show that award-reliant workers were more likely to be employed as Sales workers, Community and personal service workers and Labourers, while non-award-reliant workers were more likely to be employed as Managers, Professionals and Clerical and administrative workers. However, regardless of their award reliance status, Technicians and trades workers were more likely to be employed within small firms than larger firms.

Table 6.6: Proportion of employees within worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	1.5	8.0	1.1	8.7	7.3
Professionals	2.5	13.8	6.0	25.9	20.0
Technicians and trades workers	20.5	17.3	10.3	9.6	11.9
Community and personal service workers	22.0	6.5	26.4	9.7	11.6
Clerical and administrative workers	11.9	24.7	10.6	17.2	17.5
Sales workers	19.4	10.3	14.7	11.1	11.9
Machinery operators and drivers	4.7	7.5	5.4	7.4	7.0
Labourers	17.5	12.0	25.5	10.5	12.7
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.7 presents occupational data across different worker types. The data show that a higher percentage of Technicians and trades workers employed in small firms were non-award-reliant than award-reliant. The distribution across Technicians and trades workers, Community and personal service workers and Labourers was relatively even compared with the other occupations.

Furthermore, the percentage of award-reliant Sales workers employed in small firms (12.6 per cent) and larger firms (11.4 per cent) were similar, while the percentage of workers employed as non-award-reliant Labourers in small firms (17.3 per cent) were similar to the percentage of to award-reliant Labourers (18.5 per cent) working in larger firms.

Table 6.7: Proportion of employees across worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	1.6	20.0	1.4	77.1	100.0
Professionals	0.9	12.6	2.7	83.7	100.0
Technicians and trades workers	13.4	26.5	8.0	52.1	100.0
Community and personal service workers	14.7	10.2	20.9	54.1	100.0
Clerical and administrative workers	5.2	25.7	5.6	63.4	100.0
Sales workers	12.6	15.8	11.4	60.2	100.0
Machinery operators and drivers	5.1	19.7	7.1	68.1	100.0
Labourers	10.6	17.3	18.5	53.6	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.8 presents occupational data by sex within different worker types. The data show that a higher proportion of female award-reliant employees were Community and personal service workers, Sales workers and Labourers, compared with non-award-reliant female employees. A higher proportion of female non-award-reliant employees were Professionals, particularly those employed in larger firms (31.1 per cent) and Clerical and administrative workers, particularly those employed in small firms (43.0 per cent).

For males, a higher proportion of award-reliant employees were Labourers and Community and personal service workers, compared with male non-award-reliant employees. Higher proportions of male employees working as Technicians and trades workers were employed in small firms than larger firms, although a higher proportion were award-reliant and working in small firms (37.6 per cent).

While a higher proportion of male non-award-reliant employees were Managers and Professionals, similar proportions of Sales workers were recorded among non-award-reliant workers employed in small (9.0 per cent) and larger firms (9.4 per cent) and award-reliant workers employed in larger firms (10.2 per cent). In contrast, a higher proportion of female Sales workers were award-reliant and working in small and larger firms compared with non-award-reliant workers.

Female award-reliant employees working in small firms were more likely to be employed as Community and personal service workers (31.8 per cent) and Sales workers (23.0 per cent), while male award-reliant workers employed in small firms were more likely to work as Technicians and trades workers (37.6 per cent), Labourers (22.8 per cent) and Sales workers (14.3 per cent).

Table 6.8: Proportion of employees within worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	1.1	10.2	1.5	11.1	9.5
Professionals	0.6	12.5	3.5	20.6	16.4
Technicians and trades workers	37.6	28.3	20.7	16.6	20.6
Community and personal service workers	8.5	2.6	16.0	5.4	5.8
Clerical and administrative workers	5.1	8.3	5.8	9.4	8.6
Sales workers	14.3	9.0	10.2	9.4	9.7
Machinery operators and drivers	9.9	13.2	10.9	13.2	12.8
Labourers	22.8	15.8	31.4	14.3	16.5
Total	100.0	100.0	100.0	100.0	100.0
Female					
Managers	1.7	5.4	0.9	6.3	5.1
Professionals	3.8	15.4	7.7	31.1	23.5
Technicians and trades workers	8.3	4.8	3.3	2.6	3.6
Community and personal service workers	31.8	10.8	33.5	14.0	17.1
Clerical and administrative workers	16.8	43.0	13.9	24.9	26.1
Sales workers	23.0	11.7	17.7	12.7	14.0
Machinery operators and drivers	0.9	1.1	1.7	1.6	1.5
Labourers	13.6	7.7	21.4	6.8	9.1
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.9 presents occupational data by sex across different worker types. The data show that similar percentages of male award-reliant Sales workers were employed in small and larger firms, while similar percentages of female Sales workers who were non-award-reliant and working in small firms were also found for award-reliant workers in small and larger firms.

In addition, the data reveal that a higher percentage of male Technicians and trades workers employed in small firms were more likely to be non-award-reliant (27.2 per cent), than award-reliant (12.1 per cent), which was not reflected in the data for females. For females, similar percentages of Technicians and trades workers were distributed between award-reliant workers in small firms (20.6 per cent) and non-award-reliant workers in small firms (22.8 per cent). This was also the case for Labourers, where similar percentages were distributed across award-reliant workers in small firms (13.2 per cent) and non-award-reliant workers in small firms (14.4 per cent).

Table 6.9: Proportion of employees across worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Males					
Managers	0.8	21.2	1.2	76.8	100.0
Professionals	0.2	15.1	1.6	83.0	100.0
Technicians and trades workers	12.1	27.2	7.7	53.1	100.0
Community and personal service workers	9.6	8.9	21.1	60.4	100.0
Clerical and administrative workers	4.0	19.2	5.1	71.7	100.0
Sales workers	9.8	18.5	8.0	63.8	100.0
Machinery operators and drivers	5.1	20.3	6.5	68.0	100.0
Labourers	9.2	19.0	14.6	57.2	100.0
Females					
Managers	2.9	17.9	1.9	77.4	100.0
Professionals	1.4	11.0	3.5	84.0	100.0
Technicians and trades workers	20.6	22.8	9.9	46.8	100.0
Community and personal service workers	16.3	10.7	20.9	52.0	100.0
Clerical and administrative workers	5.7	27.8	5.7	60.8	100.0
Sales workers	14.4	14.1	13.6	57.9	100.0
Machinery operators and drivers	5.5	13.0	13.0	68.5	100.0
Labourers	13.2	14.4	25.1	47.4	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In conclusion, the data analysis suggests that in most cases occupational composition is more likely to be associated with award reliance than firm size, since award-reliant workers of small and larger firms tended to share the same occupation. However, this was not always the case, for example the data analysis presented across worker types showed that for female Sales workers the distribution was not found to be associated with firm size or award reliance.

6.3.1 Occupation and full-time and part-time employment

This section looks at the occupational composition of employees that have been categorised by the four 'worker types', by sex and full-time and part-time status. The analysis looks at the proportions of employees working in defined ANZSCO occupations 'within' and 'across' the different worker types. The section found that differences between occupations were not always associated with firm size or award reliance, and instead were sometimes associated with sex and/or full-time and part-time status.

Table 6.10 shows that the proportions of Community and personal service workers, Sales workers and Labourers working part time were greater than the proportions working full time. While part-time award-reliant workers of both firm sizes were most likely to be Community and personal service workers and Labourers, the proportions of part-time Sales workers who were award-reliant and employed in small firms (22.2 per cent) and larger firms (19.1 per cent) as well as those who were non-award-reliant and employed in larger firms (20.0 per cent) were similar.

The table also reveals that Technicians and trades workers were more likely to be employed full time. A higher proportion of Technicians and trades workers were more likely to be award-reliant and working in small firms (39.5 per cent), while similar proportions were shared between non-award-reliant workers in small firms (23.5 per cent) and award-reliant workers in larger firms (23.2 per cent).

Differences between the proportions of workers employed full time and part time were found in occupations such as Sales workers. While Sales workers employed full time were more likely to be award-reliant and working in small firms (14.9 per cent) compared with other worker types, the proportions for part-time workers were relatively even within the worker types.

Table 6.10: Proportion of full-time and part-time employees within worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Managers	3.1	11.2	2.6	12.3	11.1
Professionals	1.3	14.2	8.5	26.9	22.2
Technicians and trades workers	39.5	23.5	23.2	13.0	16.9
Community and personal service workers	10.8	3.0	14.4	4.2	4.9
Clerical and administrative workers	13.5	20.4	15.4	18.8	18.6
Sales workers	14.9	8.9	7.5	6.5	7.4
Machinery operators and drivers	5.3	9.2	8.4	9.7	9.3
Labourers	11.5	9.6	19.8	8.6	9.6
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Part-time					
Managers	0.4	2.4	0.2	1.4	1.3
Professionals	3.2	13.2	4.4	23.8	16.6
Technicians and trades workers	8.5	6.8	2.3	2.9	4.1
Community and personal service workers	29.2	12.5	33.9	20.6	22.2
Clerical and administrative workers	10.9	31.8	7.6	14.1	15.8
Sales workers	22.2	12.6	19.1	20.0	18.9
Machinery operators and drivers	4.3	4.6	3.6	2.8	3.4
Labourers	21.3	16.2	29.0	14.3	17.6
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.11 presents the occupational composition of employees working full time and part time across different worker types. The data reveal that the percentages of full-time Community and personal service workers across worker types were similar between award-reliant (10.9 per cent) and non-award-reliant (11.5 per cent) workers in small firms. In addition, the percentages of full-time Clerical and administrative services workers and full-time Sales workers who were non-award-reliant and working in small firms were higher than the percentage of award-reliant workers in small and larger firms.

The table also presents data on the proportion of part-time employees working in different occupations across worker types. The data show that the percentages of Sales workers employed part time were similar across award-reliant workers employed in small and larger firms. While a higher percentage of award-reliant employees working as Labourers on a part-time basis were employed in larger firms, similar percentages of part-time Labourers were employed in small firms.

A higher percentage of Technicians and trades workers employed on a part-time basis worked in small firms compared with full-time workers, particularly for award-reliant workers. Part-time workers across all occupations were more likely to be award-reliant than full-time workers.

Table 6.11: Proportion of full-time and part-time employees across worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Managers	1.4	19.1	1.4	78.2	100.0
Professionals	0.3	12.0	2.3	85.4	100.0
Technicians and trades workers	11.5	26.2	8.0	54.2	100.0
Community and personal service workers	10.9	11.5	17.2	60.5	100.0
Clerical and administrative workers	3.5	20.7	4.8	70.9	100.0
Sales workers	9.8	22.5	5.9	61.8	100.0
Machinery operators and drivers	2.8	18.6	5.3	73.3	100.0
Labourers	5.9	18.9	12.0	63.3	100.0
Part-time					
Managers	3.8	32.3	2.3	61.5	100.0
Professionals	2.3	13.9	3.8	79.9	100.0
Technicians and trades workers	24.9	28.5	8.0	38.6	100.0
Community and personal service workers	16.0	9.8	22.3	51.9	100.0
Clerical and administrative workers	8.4	35.0	7.0	49.6	100.0
Sales workers	14.3	11.7	14.8	59.2	100.0
Machinery operators and drivers	15.3	23.9	15.3	45.7	100.0
Labourers	14.7	16.0	23.9	45.4	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.3.1.1 Occupation and full-time employment status by sex

Table 6.12 looks at the occupation of full-time working males and females within different worker types. For males, relatively high proportions of award-reliant employees were Technicians and trades workers and Labourers for both firm sizes, while for females, relatively high proportions of award-reliant workers were Community and personal services workers and Clerical and administrative workers for both firm sizes.

While males and females employed as full-time Labourers were more likely to be award-reliant and working in larger firms than other worker types, a higher proportion of females were more likely to be Clerical and administrative workers, particularly non-award-reliant workers in small firms (45.7 per cent).

The data also show that a majority of male full-time employees working as Technicians and trades workers were award-reliant and employed in small firms. Although a relatively high proportion of female employees were also full-time Technicians and trades workers who were award-reliant and working in small firms (16.7 per cent), there were similar proportions between non-award-reliant workers in small firms (6.8 per cent) and award-reliant workers in larger firms (6.8 per cent). In addition, a higher proportion of male and female Sales workers working full-time were award-reliant and employed in small firms, while Sales workers within other worker types shared similar proportions.

Males were more likely to work as Machinery operators and drivers than females. Similar proportions of male full-time Machinery operators and drivers were reported for all workers types except for award-reliant workers employed in small firms, who recorded a lower proportion.

Table 6.12: Proportion of full-time employees within worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	1.9	12.3	2.8	13.6	12.2
Professionals	0.5	13.2	5.3	21.8	18.1
Technicians and trades workers	55.0	32.0	37.4	19.5	24.7
Community and personal service workers	2.8	1.0	7.9	2.7	2.6
Clerical and administrative workers	5.2	7.6	6.8	10.1	9.2
Sales workers	13.2	8.5	5.7	6.3	7.0
Machinery operators and drivers	8.6	13.2	13.0	14.6	14.0
Labourers	12.8	12.4	21.0	11.4	12.1
Total	100.0	100.0	100.0	100.0	100.0
Female					
Managers	4.9	9.2	2.5	10.4	9.4
Professionals	2.5	16.2	12.3	34.6	28.4
Technicians and trades workers	16.7	6.8	6.8	3.1	4.7
Community and personal service workers	22.5	6.8	22.0	6.5	8.4
Clerical and administrative workers	25.8	45.7	25.4	31.8	33.3
Sales workers	17.4	9.7	9.6	6.8	8.0
Machinery operators and drivers	0.5	1.5	3.0	2.3	2.1
Labourers	9.6	4.1	18.4	4.5	5.6
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.3.1.2 Occupation and part-time employment status by sex

Table 6.13 looks at the occupational composition of employees working part-time within different worker types. The data show that males and females working part-time as Labourers were more likely to be award-reliant. While females working part-time and employed as Community and personal service workers were more likely to be award-reliant, males employed in this occupation on a part-time basis were more likely to be award-reliant and employed in larger firms. However, similar proportions were shared between workers employed in small firms (15.5 per cent) and non-award-reliant workers employed in larger firms (16.1 per cent).

Between 2006 and 2010, the proportion of males and females working part-time as Sales workers decreased within most worker types. The decrease was particularly strong for male award-reliant workers employed in small firms, as the percentage of Sales workers within this worker type decreased from 34.1 per cent to 15.7 per cent (see Appendix 1). As a result, a higher proportion of males employed as part-time Sales workers were non-award-reliant and working in larger firms (21.7 per cent), while award-reliant workers employed in small and larger firms shared similar proportions (15.7 per cent and 14.9 per cent respectively). In contrast, a higher proportion of female Sales workers were award-reliant and employed in small firms (25.0 per cent) and similar proportions of these workers were shared between workers in larger firms, regardless of award reliance status. Nevertheless, for males and females, an increase in Sales workers was recorded only for non-award-reliant workers in small firms.

Technicians and trades workers employed part time were more likely to work in small firms, regardless of award reliance status. However, a higher proportion of part-time males were reported as Technicians and trades workers than females. Similarly, while a higher proportion of part-time males than females were employed as Machinery operators and drivers, these workers were also more likely to be employed within small firms. In addition, while a higher proportion of females were employed as part-time Clerical and administrative service workers than males, both males and females employed as this occupation were more likely to be non-award-reliant and working in small firms, compared with other worker types.

Table 6.13: Proportion of part-time employees within worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	0.2	2.5	0.1	1.1	1.1
Professionals	0.7	9.8	1.6	16.0	10.8
Technicians and trades workers	16.0	15.0	3.2	4.8	7.8
Community and personal service workers	15.5	8.7	24.5	16.1	16.0
Clerical and administrative workers	5.1	11.0	4.8	6.5	6.9
Sales workers	15.7	11.1	14.9	21.7	18.0
Machinery operators and drivers	11.6	13.2	8.6	7.6	9.2
Labourers	35.3	28.7	42.3	26.1	30.2
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Managers	0.6	2.3	0.2	1.6	1.4
Professionals	4.3	14.7	5.7	27.2	19.2
Technicians and trades workers	5.2	3.2	1.8	2.0	2.6
Community and personal service workers	35.3	14.1	38.3	22.5	24.8
Clerical and administrative workers	13.5	40.8	9.0	17.2	19.7
Sales workers	25.0	13.3	21.2	19.3	19.2
Machinery operators and drivers	1.0	0.9	1.2	0.7	0.9
Labourers	15.1	10.7	22.6	9.4	12.2
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In conclusion, the occupations that were more likely to be award-reliant regardless of firm size were Sales workers, Community and personal service workers and Labourers. Technicians and trades workers were more likely to be employed in small firms.

The analysis demonstrated that the occupations of different types of workers were not always associated with firm size or award reliance and instead were sometimes associated with sex and/or full-time or part-time status. For example, the analysis showed that the proportion of female employees working full time or part time as Community and personal service workers was greater for award-reliant workers than non-award-reliant workers. However, while the proportion of male employees working full time or part time as Community and personal service workers was greater for award-reliant workers in larger firms, similar proportions were reported for award-reliant workers in small firms and non-award-reliant workers in larger firms.

6.3.2 Occupation by employment type

This section looks at the occupational composition of employees that have been categorised by the four 'worker types', by sex and employment type. The section found that the employment type of workers was more likely to be associated with award reliance than firm size for most occupations.

Award-reliant employees working on a permanent or fixed-term contract were more likely to be employed as Community and personal service workers, while non-award-reliant employees were more likely to be employed as Managers and Professionals. Although a higher proportion of award-reliant employees working in small firms on a permanent or fixed-term basis were Technicians and trades workers, relatively high proportions of these workers were found within all worker types. Similarly, while a higher proportion of Clerical and administrative service workers were non-award-reliant and working in small firms on a fixed-term or permanent basis, relatively high proportions were employed within all worker types as well.

Compared with other worker types, Labourers working on a permanent or fixed-term basis were more likely to be award reliant and working in larger firms. Although a higher proportion of Sales workers were award-reliant and working in small firms on a fixed-term or permanent basis compared with the other worker types, similar proportions of Sales workers were found within the remaining worker types.

Compared with permanent or fixed-term workers, higher proportions of Sales workers and Labourers worked on a casual basis within most worker types. While higher proportions of award-reliant employees were working as Community and personal service workers on a casual basis, relatively high proportions were also found for non-award-reliant workers.

Table 6.14: Proportion of employees within worker types by occupation and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Managers	2.6	10.1	2.0	10.3	9.3
Professionals	2.8	15.6	8.8	27.8	23.1
Technicians and trades workers	29.9	20.1	16.6	10.6	13.7
Community and personal service workers	18.7	4.1	20.6	8.5	9.1
Clerical and administrative workers	14.6	25.9	12.1	18.7	19.4
Sales workers	16.7	9.0	7.5	8.3	8.9
Machinery operators and drivers	3.4	6.9	4.9	7.3	6.8
Labourers	11.3	8.5	27.5	8.4	9.8
Total	100.0	100.0	100.0	100.0	100.0
Casual					
Managers	0.2	1.7	0.1	0.4	0.5
Professionals	2.1	8.6	2.6	15.9	9.9
Technicians and trades workers	9.5	9.0	2.9	4.4	5.8
Community and personal service workers	26.0	13.6	33.3	15.9	20.2
Clerical and administrative workers	8.7	21.0	8.9	9.3	11.5
Sales workers	22.4	14.1	23.2	24.9	22.1
Machinery operators and drivers	6.2	9.3	6.1	8.0	7.7
Labourers	24.8	22.7	23.0	21.2	22.4
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.15 looks at the composition of employees working as casual or permanent or fixed-term employees within different occupations and across worker types. The data show that, with the exception of non-award-reliant employees working in larger firms, a higher percentage of Managers, Technicians and trades workers, Clerical and administrative service workers, Sales workers and Machinery operators and drivers were non-award-reliant and employed on a permanent or fixed-term contract working in small firms.

The data also show that relative to employees working on a permanent or fixed-term contract, a greater percentage of casual employees were award-reliant and employed in small and larger firms for all occupations. For example, while over half of casual Sales workers were non-award-reliant and employed in larger firms (52.3 per cent), a greater percentage of award-reliant employees working on a casual basis were employed in small (15.7 per cent) and larger (19.2 per cent) firms than Sales workers employed on a permanent or fixed-term basis. In addition, the percentages of Labourers working on a casual basis across small firms, as well as the percentage of Labourers who were award-reliant and working in larger firms, were similar compared with the distribution of Labourers employed on a permanent or fixed-term contract. Over half of casual employees working as Technicians and trades workers were employed in small firms (56.3 per cent).

Table 6.15: Proportion of employees across worker types by occupation and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Managers	1.5	19.3	1.4	77.8	100.0
Professionals	0.7	12.0	2.5	84.8	100.0
Technicians and trades workers	11.8	26.0	7.9	54.3	100.0
Community and personal service workers	11.2	8.1	14.8	65.9	100.0
Clerical and administrative workers	4.1	23.8	4.1	68.0	100.0
Sales workers	10.3	18.1	5.5	66.1	100.0
Machinery operators and drivers	2.7	18.0	4.6	74.7	100.0
Labourers	6.2	15.3	18.2	60.2	100.0
Casual					
Managers	6.1	60.3	2.6	31.0	100.0
Professionals	3.3	17.5	4.9	74.3	100.0
Technicians and trades workers	25.4	30.9	9.0	34.7	100.0
Community and personal service workers	19.9	13.5	30.2	36.4	100.0
Clerical and administrative workers	11.8	36.7	14.2	37.3	100.0
Sales workers	15.7	12.8	19.2	52.3	100.0
Machinery operators and drivers	12.6	24.4	14.6	48.4	100.0
Labourers	17.1	20.3	18.8	43.8	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.3.2.1 Occupation and permanent or fixed-term employment by sex

This section looks at the occupational composition of employees working on a permanent or fixed-term basis within different worker types. The data show that relatively high proportions of male award-reliant workers employed in small and larger firms were Technicians and trades workers and Labourers, while for females, relatively high proportions of award-reliant workers employed in small and larger firms were Community and personal service workers and Clerical and administrative service workers. Although a higher proportion of non-award-reliant females were employed as Clerical and administrative service workers, a higher proportion were also employed as Professional workers, compared with award-reliant workers as well. This was also evident for males, with high proportions of non-award-reliant male workers employed as Managers and Professionals.

The data also reveal that while male and female employees working on a fixed-term or permanent basis as Technicians and trades workers were more likely to be award-reliant and employed in small firms, similar proportions were found for non-award-reliant workers in small firms and award-reliant workers in larger firms. In addition, while a high proportion of male and female employees working as Labourers were award-reliant and working in larger firms, non-award-reliant workers had similar proportions. Both male and female Sales workers were more likely to be award-reliant and employed in small firms compared with the other worker types.

Table 6.16: Proportion of permanent/fixed-term employees within worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	1.8	12.2	2.5	13.2	11.8
Professionals	0.5	14.4	5.5	22.3	18.7
Technicians and trades workers	50.7	31.3	32.7	18.3	23.3
Community and personal service workers	4.9	1.2	7.8	4.2	3.8
Clerical and administrative workers	4.7	8.5	4.4	10.1	9.2
Sales workers	15.9	9.2	6.2	7.5	8.2
Machinery operators and drivers	7.0	11.6	9.5	13.0	12.2
Labourers	14.6	11.6	31.4	11.5	12.7
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Managers	3.2	7.2	1.6	7.4	6.7
Professionals	4.7	17.1	11.2	33.4	27.5
Technicians and trades workers	12.1	5.5	4.8	2.9	4.0
Community and personal service workers	30.5	7.9	30.0	12.8	14.4
Clerical and administrative workers	23.1	48.4	17.8	27.5	29.7
Sales workers	17.4	8.7	8.5	9.1	9.5
Machinery operators and drivers	0.3	0.8	1.4	1.5	1.3
Labourers	8.5	4.4	24.7	5.4	6.9
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.3.2.2 Occupation and casual employment by sex

This section looks at the occupational composition of employees working on a casual basis within different worker types. The data in table 6.17 found that, for both males and females, Technicians and trades workers were more likely to be employed on a casual basis in small firms, than in larger firms. However, award reliance or firm size was not a factor for most occupations. For example, a relatively similar proportion of Labourers working on a casual basis were employed within all workers types for both males and females.

Award-reliant female casual workers were more likely to be Community and personal workers, regardless of firm size, while non-award-reliant female casual workers employed in small firms were more likely to be Clerical and administrative workers. Male casual workers were more likely to be Labourers for all worker types.

While the proportion of male Sales workers employed on a casual basis was highest for award-reliant workers in small firms in 2006, their proportions decreased in 2010 from 34.5 per cent to 12.0 per cent. As a result, a higher proportion of male employees working as Sales workers on a casual basis were found within larger firms in 2010. The only increase recorded in female casual Sales workers was for non-award-reliant workers in small firms (see Appendix 1).

Table 6.17: Proportion of casual employees within worker type by occupation and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	0.2	2.1	0.1	0.3	0.6
Professionals	0.7	4.7	0.9	11.8	7.1
Technicians and trades workers	18.3	16.7	4.9	7.7	10.4
Community and personal service workers	13.7	8.4	26.8	11.4	13.6
Clerical and administrative workers	5.9	7.8	7.7	5.5	6.3
Sales workers	12.0	8.2	15.5	19.2	15.5
Machinery operators and drivers	14.3	19.4	12.6	14.7	15.2
Labourers	35.0	32.8	31.5	29.5	31.2
Total	100.0	100.0	100.0	100.0	100.0
Female					
Managers	0.2	1.3	0.1	0.5	0.5
Professionals	2.9	11.5	3.7	19.6	11.9
Technicians and trades workers	4.4	3.2	1.6	1.4	2.3
Community and personal service workers	33.1	17.5	37.3	20.1	25.2
Clerical and administrative workers	10.4	30.8	9.6	12.7	15.4
Sales workers	28.5	18.4	27.9	30.2	27.1
Machinery operators and drivers	1.5	2.0	2.1	1.9	1.9
Labourers	18.8	15.3	17.6	13.7	15.7
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In conclusion, the analysis demonstrated that while certain occupations seemed to be associated with award reliance and in some instances, firm size, this was only for workers employed on a permanent or fixed-term contract. The occupational composition of employees working on a casual basis seemed less related to award reliance status or firm size, for both males and females.

This section on occupations has shown that award-reliant workers employed in small firms resembled award-reliant workers in larger firms more than they resembled non-award-reliant workers employed in small firms. Sales workers, Labourers and Community and personal service workers were more likely to be award-reliant workers employed in firms of both sizes. However, Technicians and trades workers comprised a relatively high proportion of workers in small firms, regardless of award reliance status. Clerical and administrative workers
and Professionals also comprised a relatively high proportion among non-award-reliant workers employed in small firms.

6.4 Industry

The EEH CURF for 2010 is the first to include the industry division variable at the one-digit level. This section will analyse the proportion of employees across different worker types by industry and a range of other explanatory variables, such as sex, full-time and part-time status and employment type.

The section shows that in most cases the industry profile of worker types is more associated with award reliance than with firm size. Table 6.18 shows that award-reliant workers were more likely to be employed in Accommodation and food services and Retail trade compared with non-award-reliant workers, for both firm sizes, while award-reliant workers in larger firms were relatively more likely to be employed in Administrative and support services (17.6 per cent) than for the other worker types.

In addition, non-award-reliant workers in small firms were more likely to be employed in Construction (13.8 per cent) and Professional, scientific and technical services (14.9 per cent), while non-award-reliant workers in larger firms were more likely to be employed in Health care and social assistance (15.9 per cent) and Education and training (14.7 per cent).

Differences by firm size were found in Other services, where workers were relatively more likely to be employed in small firms. Workers in Health care and social assistance and Manufacturing were relatively more likely to be employed in larger firms.

The BLD analysis in chapter 5 showed that most award-reliant firms were in Construction, Retail trade and Agriculture, forestry and fishing.[37] Retail trade and Construction also comprised a relatively high proportion of combination firms employing both award-reliant workers and non-award-reliant workers.

37 The EEH survey does not include the Agriculture, forestry and fishing industry.

Table 6.18: Proportion of employees within worker type by industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Mining	0.1	0.8	0.3	2.4	1.7
Manufacturing	7.7	9.5	10.0	10.5	10.1
Electricity, gas, water and waste services	0.2	0.4	0.3	1.7	1.2
Construction	6.6	13.8	1.7	4.2	5.9
Wholesale trade	4.0	7.7	3.0	4.6	4.9
Retail trade	18.5	8.6	12.5	10.8	11.1
Accommodation and food services	21.1	6.2	22.0	4.9	8.0
Transport, postal and warehousing	2.9	4.7	2.1	5.5	4.9
Information, media and telecommunications	0.3	0.9	1.0	2.6	1.9
Financial and insurance services	0.7	4.3	0.5	5.8	4.6
Rental, hiring and real estate services	4.0	4.3	2.1	1.2	2.0
Professional, scientific and technical services	2.4	14.9	1.6	5.9	6.9
Administrative and support services	5.2	4.8	17.6	5.3	6.3
Education and training	1.2	3.0	4.9	14.7	10.6
Health care and social assistance	12.5	7.0	15.9	15.9	14.0
Arts and recreation services	1.8	2.1	1.8	2.0	2.0
Other services	10.9	7.1	2.9	2.1	3.8
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.19 presents the distribution of employees within industries across different worker types. The data show that almost half of the workers in Accommodation and food services were award-reliant (46 per cent). In Retail trade, the distribution across award-reliant workers employed in small and larger firms and non-award-reliant workers employed in small firms was relatively similar compared with other industries.

The data in Table 6.19 also shows a higher proportion of employees within Construction, Rental, hiring and real estate services and Other services employed in small firms rather than larger firms.

Table 6.19: Proportion of employees across worker type by industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Mining	0.0	8.8	1.8	89.5	100.0
Manufacturing	5.9	17.2	9.1	67.6	100.0
Electricity, gas, water and waste services	0.8	5.8	2.5	90.9	100.0
Construction	8.6	42.5	2.7	46.4	100.0
Wholesale trade	6.3	28.4	5.5	59.8	100.0
Retail trade	12.8	14.2	10.3	62.7	100.0
Accommodation and food services	20.6	14.3	25.4	39.7	100.0
Transport, postal and warehousing	4.5	17.7	3.9	73.7	100.0
Information, media and telecommunications	1.0	8.2	4.6	85.6	100.0
Financial and insurance services	1.1	16.9	1.1	80.7	100.0
Rental, hiring and real estate services	15.2	38.2	9.8	36.8	100.0
Professional, scientific and technical services	2.6	39.5	2.2	55.7	100.0
Administrative and support services	6.5	13.9	25.6	54.0	100.0
Education and training	0.8	5.2	4.2	89.7	100.0
Health care and social assistance	6.9	9.1	10.5	73.5	100.0
Arts and recreation services	7.1	19.9	8.7	64.8	100.0
Other services	22.3	34.6	7.2	35.9	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.20 looks at the proportion of males and females within different worker types by industry. The data reveal that higher proportions of male workers employed in small firms worked in Construction, while higher proportions of male workers employed in larger firms worked in Manufacturing. Females were more likely to be employed in Health care and social assistance and Education and training than males for all worker types.

For both males and females, a higher proportion of award-reliant workers were employed in Retail trade, particularly in small firms (20.8 per cent and 16.8 per cent, respectively), compared with other worker types. Higher proportions of award-reliant workers in both firm sizes were also recorded for Accommodation and food services.

Table 6.20: Proportion of employees within worker type by sex and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.1	1.2	0.8	4.0	2.9
Manufacturing	9.1	12.8	15.3	15.8	14.7
Electricity, gas, water and waste services	0.3	0.6	0.6	2.7	1.9
Construction	15.5	20.5	3.4	7.3	10.1
Wholesale trade	6.0	10.1	4.4	5.8	6.6
Retail trade	20.8	7.8	11.6	10.1	10.5
Accommodation and food services	17.6	5.6	22.3	5.1	7.3
Transport, postal and warehousing	5.0	6.6	3.0	7.9	7.1
Information, media and telecommunications	0.1	0.9	0.9	2.9	2.2
Financial and insurance services	0.1	2.9	0.4	5.1	4.0
Rental, hiring and real estate services	3.8	3.1	1.9	1.3	1.8
Professional, scientific and technical services	1.3	12.8	1.1	6.5	7.0
Administrative and support services	6.9	3.5	19.1	5.8	6.4
Education and training	0.5	1.1	3.8	9.3	6.7
Health care and social assistance	0.8	1.3	6.6	6.5	5.1
Arts and recreation services	1.9	1.6	1.8	2.1	1.9
Other services	10.5	7.8	3.1	2.1	3.9
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	0.5	0.0	0.7	0.5
Manufacturing	6.8	5.9	6.3	5.4	5.7
Electricity, gas, water and waste services	0.0	0.2	0.1	0.8	0.5
Construction	0.2	6.2	0.6	1.3	1.9
Wholesale trade	2.5	4.9	2.0	3.3	3.4
Retail trade	16.8	9.6	13.0	11.5	11.8
Accommodation and food services	23.8	6.9	21.8	4.7	8.6
Transport, postal and warehousing	1.4	2.6	1.4	3.2	2.7
Information, media and telecommunications	0.5	0.9	1.0	2.2	1.7
Financial and insurance services	1.1	5.9	0.6	6.4	5.2
Rental, hiring and real estate services	4.2	5.6	2.2	1.1	2.2
Professional, scientific and technical services	3.1	17.1	2.0	5.4	6.8
Administrative and support services	4.1	6.3	16.5	4.8	6.2
Education and training	1.7	5.1	5.6	20.0	14.4
Health care and social assistance	21.0	13.4	22.3	25.3	22.6
Arts and recreation services	1.7	2.7	1.8	1.9	2.0
Other services	11.3	6.3	2.7	2.1	3.7
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.21 shows the distribution of male and female employees within industries across different worker types. The data show that for females just over half of the workers in Accommodation and food services were award-reliant (51.5 per cent) while for males, the majority of employees were non-award-reliant (60.8 per cent). For both males and females, workers in Accommodation and food services were more likely to be employed in larger firms than in small firms.

With the exception of employees who were non-award-reliant and worked in larger firms, similar percentages of female employees working in Retail trade were distributed across the remaining worker types. However for males, a higher percentage of workers employed within Retail trade were award-reliant (13.2 per cent) and non-award-reliant (14.7 per cent) and worked in small firms than were award-reliant and employed in larger firms (8.5 per cent).

Within the Administrative and support services industry, a higher proportion of females were non-award-reliant and worked in small firms (17.0 per cent) than were award-reliant and employed by small firms (5.8 per cent). However, for males the proportions were relatively similar (7.2 per cent were award-reliant and employed in small firms, and 10.8 per cent were non-award-reliant and employed in small firms).

While a higher percentage of female employees working in Health care and social assistance were non-award-reliant and worked in larger firms, similar percentages were shared among award-reliant workers employed in small firms (8.2 per cent) and larger firms (10.6 per cent), as well as employees who were non-award-reliant and employed in small firms (10.0 per cent). For males, a higher percentage of workers within this industry were award-reliant and employed in larger firms than employed in small firms.

Table 6.21: Proportion of employees across worker type by sex and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.0	7.8	2.0	90.1	100.0
Manufacturing	4.1	17.2	8.0	70.7	100.0
Electricity, gas, water and waste services	1.0	6.2	2.6	90.7	100.0
Construction	10.2	40.1	2.6	47.2	100.0
Wholesale trade	6.1	30.6	5.2	58.4	100.0
Retail trade	13.2	14.7	8.5	63.5	100.0
Accommodation and food services	16.0	15.2	23.4	45.6	100.0
Transport, postal and warehousing	4.7	18.5	3.3	73.6	100.0
Information, media and telecommunications	0.0	7.8	3.2	88.5	100.0
Financial and insurance services	0.3	14.0	0.8	85.0	100.0
Rental, hiring and real estate services	13.6	33.2	8.2	45.1	100.0
Professional, scientific and technical services	1.3	36.3	1.1	61.3	100.0
Administrative and support services	7.2	10.8	22.8	59.2	100.0
Education and training	0.5	3.3	4.4	91.9	100.0
Health care and social assistance	1.0	5.0	9.9	84.2	100.0
Arts and recreation services	6.2	16.5	7.2	70.1	100.0
Other services	17.9	40.0	6.2	35.6	100.0
Total	6.6	19.8	7.7	65.9	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	14.8	0.0	83.3	100.0
Manufacturing	10.6	17.4	12.0	60.0	100.0
Electricity, gas, water and waste services	0.0	5.8	1.9	92.3	100.0
Construction	1.0	54.4	3.1	41.5	100.0
Wholesale trade	6.5	24.3	6.2	62.6	100.0
Retail trade	12.5	13.7	11.9	61.9	100.0
Accommodation and food services	24.3	13.6	27.2	35.1	100.0
Transport, postal and warehousing	4.4	16.1	5.5	74.1	100.0
Information, media and telecommunications	2.3	8.8	6.4	82.5	100.0
Financial and insurance services	1.9	19.0	1.2	77.9	100.0
Rental, hiring and real estate services	16.5	42.0	10.7	30.4	100.0
Professional, scientific and technical services	4.0	42.6	3.1	50.4	100.0
Administrative and support services	5.8	17.0	28.4	48.9	100.0
Education and training	1.0	6.0	4.2	88.8	100.0
Health care and social assistance	8.2	10.0	10.6	71.3	100.0
Arts and recreation services	7.6	22.8	9.6	59.9	100.0
Other services	26.8	29.0	7.9	36.0	100.0
Total	8.8	16.9	10.7	63.6	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In conclusion, the 'within' analysis in this section highlights that industries were more likely to be categorised by award reliance than by firm size. This was highlighted by workers in Accommodation and food services. However, in other cases some industries, such as Construction, were categorised by firm size, while some industries were not categorised by award reliance or firm size.

6.4.1 Industry and full-time and part-time employment

This section looks at the proportions of employees within and across different worker types by industry and full-time and part-time status. The data show differences between full-time and part-time employment by industry for each worker type. For a number of industries, the distribution of part-time employment was relatively more even within each worker type than the distribution of full-time employment.

Table 6.22 shows that for full-time and part-time employees, a relatively high proportion of non-award-reliant workers in small firms were employed in Professional, scientific and technical services , while a higher proportion of award-reliant workers in larger firms were employed in Administrative and support services. In addition, a higher proportion of non-award-reliant workers in larger firms were employed in Education and training compared with other worker types. These trends represent the only similarities found between full-time and part-time employees.

For example, while the highest proportion of full-time employees who were award-reliant and employed in small firms worked in Retail trade, relatively similar but smaller proportions of workers in Retail trade were distributed within the remaining worker types. In contrast, the highest proportion of part-time workers employed were non-award-reliant employees in larger firms (17.8 per cent) in this industry, with relatively high proportions also reported for award-reliant workers in small firms (16.5 per cent) and larger firms (14.2 per cent) and non-award-reliant workers in small firms (11.0 per cent).

A high proportion of full-time employees who were award-reliant and employed in larger firms (16.3 per cent) worked in Accommodation and food services compared with other worker types. While relatively high proportions of part-time employees who were award-reliant and employed in small (30.1 per cent) and larger firms (25.6 per cent) were employed in this industry. Similar proportions of part-time employees working in the industry were also found for non-award-reliant workers of both firm sizes.

Higher proportions of employees in larger firms were employed full-time in Health care and social assistance than other worker types. For part-time employees, all worker types showed relatively high proportions of employees in this industry, although the highest proportion was recorded for non-award-reliant workers in larger firms (27.4 per cent), with similar proportions reported for award-reliant workers of both firm sizes.

Relative to part-time employment, higher proportions of full-time employees within all worker types worked in Manufacturing and higher proportions of full-time employees working in small firms worked in Construction compared with larger firms.

Table 6.22: Proportion of employees within worker type by full-time/part-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Mining	0.0	1.2	0.9	3.5	2.7
Manufacturing	9.8	12.0	16.0	14.3	13.7
Electricity, gas, water and waste services	0.4	0.5	0.5	2.4	1.9
Construction	15.2	16.6	2.4	5.9	8.1
Wholesale trade	6.1	10.5	5.3	6.1	6.8
Retail trade	21.5	7.2	9.8	7.2	8.1
Accommodation and food services	6.9	3.5	16.3	2.6	3.8
Transport, postal and warehousing	3.0	5.0	2.2	6.9	6.1
Information, media and telecommunications	0.2	0.9	1.5	3.2	2.6
Financial and insurance services	0.6	4.2	1.0	7.0	5.8
Rental, hiring and real estate services	4.9	4.6	1.9	1.5	2.3
Professional, scientific and technical services	3.5	15.7	1.9	7.5	8.6
Administrative and support services	3.0	3.8	15.8	5.0	5.3
Education and training	0.4	0.9	5.8	13.2	9.9
Health care and social assistance	7.3	4.6	14.4	10.1	9.2
Arts and recreation services	2.0	1.3	1.0	1.3	1.3
Other services	14.8	7.5	3.3	2.2	3.9
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Part-time					
Mining	0.0	0.2	0.0	0.1	0.1
Manufacturing	6.5	5.3	6.3	3.1	4.4
Electricity, gas, water and waste services	0.0	0.3	0.1	0.3	0.2
Construction	1.1	9.0	1.3	1.1	2.5
Wholesale trade	2.6	2.9	1.5	1.6	1.9
Retail trade	16.5	11.0	14.2	17.8	15.9
Accommodation and food services	30.1	10.8	25.6	9.4	14.5
Transport, postal and warehousing	2.8	4.2	2.0	2.8	3.0
Information, media and telecommunications	0.4	0.8	0.7	1.3	1.0
Financial and insurance services	0.7	4.5	0.1	3.4	2.8
Rental, hiring and real estate services	3.5	3.7	2.3	0.6	1.7
Professional, scientific and technical services	1.6	13.4	1.4	2.8	4.3
Administrative and support services	6.6	6.5	18.8	5.9	7.9
Education and training	1.8	6.5	4.2	17.5	11.7
Health care and social assistance	15.8	11.0	16.8	27.4	21.6
Arts and recreation services	1.6	3.4	2.3	3.2	2.9
Other services	8.4	6.4	2.6	1.8	3.6
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.23 presents the industry composition of employees working on a full-time and part-time basis across different worker types. The data reveal that a relatively high proportion of full-time and part-time workers employed in Other services and Rental, hiring and real estate services worked in small firms, with the percentages greater for part-time employees.

In addition, unlike full-time employees, a higher percentage of part-time workers employed in Accommodation and food services, Administrative and support services and Manufacturing were award-reliant for both firm sizes. While higher percentages of employees working full-time in Accommodation and food services and Administrative and support services were award-reliant and employed in larger firms (24.9 per cent and 17.3 per cent respectively), a higher proportion of full-time workers in Manufacturing were non-award-reliant and worked in small firms than were award-reliant (16.5 per cent compared with 3.5 per cent).

In Retail trade, a higher percentage of full-time workers were more likely to be employed in either of the small firm types than be award-reliant and working in a larger firm. In contrast, the percentage of part-time employees within this industry was distributed evenly among those who were employed in small firms and those who were award-reliant and working in larger firms.

Table 6.23: Proportion of employees across worker type by full-time/part-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Mining	0.1	8.2	1.7	89.9	100.0
Manufacturing	3.5	16.5	6.7	73.3	100.0
Electricity, gas, water and waste services	0.9	4.8	1.8	92.4	100.0
Construction	9.3	38.4	1.7	50.6	100.0
Wholesale trade	4.3	28.8	4.5	62.4	100.0
Retail trade	13.1	16.9	7.0	63.1	100.0
Accommodation and food services	9.0	17.4	24.9	48.6	100.0
Transport, postal and warehousing	2.4	15.5	2.1	80.0	100.0
Information, media and telecommunications	0.4	6.8	3.3	89.4	100.0
Financial and insurance services	0.6	13.6	1.1	84.8	100.0
Rental, hiring and real estate services	10.8	38.4	4.9	45.9	100.0
Professional, scientific and technical services	2.0	34.6	1.3	62.0	100.0
Administrative and support services	2.9	13.5	17.3	66.3	100.0
Education and training	0.2	1.7	3.5	94.6	100.0
Health care and social assistance	3.9	9.4	9.2	77.5	100.0
Arts and recreation services	7.6	18.8	4.4	69.3	100.0
Other services	18.7	36.4	4.9	39.9	100.0
Total	4.9	18.8	5.8	70.4	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Part-time					
Mining	4.5	35.2	0.0	60.3	100.0
Manufacturing	18.1	21.3	20.9	39.7	100.0
Electricity, gas, water and waste services	1.9	22.8	5.7	69.6	100.0
Construction	5.2	63.3	7.5	24.0	100.0
Wholesale trade	16.7	26.3	11.2	45.8	100.0
Retail trade	12.6	12.1	13.0	62.3	100.0
Accommodation and food services	25.2	13.0	25.7	36.1	100.0
Transport, postal and warehousing	11.6	25.2	10.0	53.2	100.0
Information, media and telecommunications	4.6	14.2	10.5	70.7	100.0
Financial and insurance services	3.0	28.1	0.9	68.1	100.0
Rental, hiring and real estate services	24.5	37.9	19.1	18.4	100.0
Professional, scientific and technical services	4.7	54.5	4.6	36.2	100.0
Administrative and support services	10.1	14.3	34.4	41.2	100.0
Education and training	1.8	9.7	5.2	83.2	100.0
Health care and social assistance	8.9	8.9	11.3	70.9	100.0
Arts and recreation services	6.6	20.5	11.3	61.6	100.0
Other services	28.7	31.5	10.8	28.9	100.0
Total	12.2	17.5	14.6	55.8	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.4.1.1 Industry and full-time status by sex

Table 6.24 presents the industry composition of full-time working males and females within different worker types. The data show that the highest proportion of females that worked full time were award-reliant employees working in small firms in Retail trade (21.1 per cent). This proportion was higher than other worker types, with non-award-reliant employees working in small and larger firms and award-reliant employees working in larger firms sharing similar proportions. For full-time working males employed in the same industry, a higher proportion were award-reliant employees working in small firms (21.8 per cent) with a relatively high proportion of award-reliant employees working in larger firms as well (10.5 per cent).

The highest proportions of males working full-time as award-reliant employees (25.7 per cent) and as non-award-reliant employees (22.0 per cent) in small firms worked in Construction. While the highest

proportion of males working full-time as award-reliant employees in larger firms worked in Manufacturing (23.6 per cent), relatively high proportions of these workers were found within other worker types as well.

For females, while the highest proportion of award-reliant full-time workers employed in larger firms worked in Health care and social assistance (25.5 per cent), relatively high proportions were also reported within other worker types, with similar proportions reported for award-reliant workers in small firms (17 per cent) and non-award-reliant workers in larger firms (18.2 per cent).

However, for full-time working males and females, relatively high proportions of award-reliant employees working in Accommodation and food services were employed in larger firms (14.5 per cent and 18.5 per cent, respectively), while relatively high proportions of non-award-reliant employees working in small firms were employed in Professional, scientific and technical services. In addition, a relatively high proportion of award-reliant employees in small firms worked in Other services.

Table 6.24: Proportion of full-time employees within worker type by industry and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.2	1.4	1.6	5.0	3.8
Manufacturing	11.2	14.5	23.6	18.9	17.9
Electricity, gas, water and waste services	0.6	0.6	1.0	3.2	2.5
Construction	25.7	22.0	4.3	8.5	11.9
Wholesale trade	6.8	11.9	6.8	6.6	7.8
Retail trade	21.8	7.3	10.5	7.3	8.1
Accommodation and food services	6.8	3.2	14.5	2.5	3.5
Transport, postal and warehousing	4.6	5.9	3.1	8.7	7.6
Information, media and telecommunications	0.0	0.9	1.2	3.3	2.5
Financial and insurance services	0.2	3.2	0.8	6.0	4.9
Rental, hiring and real estate services	3.9	3.1	1.7	1.4	1.9
Professional, scientific and technical services	1.2	13.2	1.2	7.5	8.1
Administrative and support services	1.0	2.2	15.3	4.9	4.7
Education and training	0.0	0.5	4.8	8.3	6.1
Health care and social assistance	0.8	0.5	5.0	4.7	3.7
Arts and recreation services	2.7	1.0	0.6	1.2	1.2
Other services	12.4	8.4	3.9	1.9	3.8
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	0.8	0.0	1.3	1.0
Manufacturing	7.5	7.2	6.9	7.3	7.3
Electricity, gas, water and waste services	0.0	0.2	0.1	1.2	0.9
Construction	0.2	6.0	0.3	1.8	2.3
Wholesale trade	4.5	7.6	3.5	5.2	5.4
Retail trade	21.1	7.2	8.7	7.2	8.0
Accommodation and food services	7.3	4.2	18.5	2.8	4.4
Transport, postal and warehousing	0.8	3.1	1.0	4.2	3.7
Information, media and telecommunications	0.4	0.9	1.7	3.1	2.6
Financial and insurance services	1.4	6.1	1.3	8.5	7.2
Rental, hiring and real estate services	6.3	7.5	2.0	1.6	2.9
Professional, scientific and technical services	6.7	20.6	2.8	7.5	9.3
Administrative and support services	6.1	6.8	16.2	5.1	6.2
Education and training	0.8	1.6	7.1	20.7	15.7
Health care and social assistance	17.0	12.5	25.5	18.2	17.7
Arts and recreation services	1.2	1.8	1.5	1.4	1.5
Other services	18.3	5.9	2.8	2.7	4.0
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.4.1.2 Industry and part-time status by sex

Table 6.25 looks at the industry composition of part-time working males and females within different worker types. The data show that the highest proportion of award-reliant workers in both firm sizes and sexes were employed in Accommodation and food services and relatively high proportions were also found in Retail trade, although this was also evident for most worker types.

For females, a relatively high proportion of award-reliant workers employed in both firm sizes worked in Health care and social assistance, which was also found within all worker types. For males, a relatively high proportion of award-reliant workers employed in both firm sizes worked in Administrative and support services.

While a high percentage of non-award-reliant males and females employed in small firms worked in Professional, scientific and technical services (11.3 and 14.3 per cent respectively), a higher proportion of males within this worker type were employed in Construction (14.9 per cent) and Accommodation and food services (14.6 per cent).

Table 6.25: Proportion of part-time employees within worker types by industry and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.0	0.2	0.0	0.1	0.1
Manufacturing	6.6	6.4	6.4	3.0	4.6
Electricity, gas, water and waste services	0.0	0.5	0.2	0.3	0.3
Construction	2.9	14.9	2.5	2.1	4.5
Wholesale trade	4.9	3.4	1.9	2.4	2.8
Retail trade	19.4	9.8	12.8	21.3	17.8
Accommodation and food services	30.9	14.6	30.4	15.3	19.5
Transport, postal and warehousing	5.6	9.0	2.9	4.7	5.3
Information, media and telecommunications	0.1	0.7	0.6	1.4	1.0
Financial and insurance services	0.0	1.6	0.0	1.8	1.2
Rental, hiring and real estate services	3.6	3.0	2.1	0.9	1.8
Professional, scientific and technical services	1.4	11.3	0.9	2.4	3.6
Administrative and support services	14.1	8.0	22.9	9.2	11.8
Education and training	1.1	3.2	2.6	13.3	8.3
Health care and social assistance	0.7	3.9	8.2	13.3	9.3
Arts and recreation services	1.0	3.8	3.0	5.4	4.2
Other services	7.9	5.6	2.4	2.9	3.9
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	0.2	0.0	0.1	0.1
Manufacturing	6.4	4.8	6.2	3.1	4.3
Electricity, gas, water and waste services	0.1	0.2	0.1	0.2	0.2
Construction	0.2	6.4	0.7	0.6	1.6
Wholesale trade	1.7	2.7	1.3	1.3	1.6
Retail trade	15.2	11.5	14.9	16.3	15.2
Accommodation and food services	29.8	9.1	23.3	6.9	12.4
Transport, postal and warehousing	1.6	2.2	1.6	2.0	1.9
Information, media and telecommunications	0.5	0.8	0.8	1.2	1.0
Financial and insurance services	1.0	5.7	0.2	4.0	3.4
Rental, hiring and real estate services	3.4	4.1	2.3	0.4	1.7
Professional, scientific and technical services	1.8	14.3	1.6	2.9	4.6
Administrative and support services	3.3	5.8	16.7	4.4	6.3
Education and training	2.1	8.0	5.0	19.3	13.2
Health care and social assistance	22.4	14.2	20.9	33.3	26.9
Arts and recreation services	1.9	3.3	2.0	2.3	2.4
Other services	8.6	6.8	2.8	1.4	3.4
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

This section demonstrated that different worker types varied by firm size, award reliance or both. For example, part-time employees in Accommodation and food services appeared to be associated with award reliance and not firm size, while in Construction, worker type appeared to be associated with firm size and depending on the full-time or part-time status of the worker, award reliance as well. However, the distribution within Retail trade was relatively even across the worker types, which implied that neither award reliance nor firm size was a factor in categorising workers in that industry.

6.4.2 Industry by employment type

This section looks at the industry composition of employees working on a casual basis or on a permanent of fixed-term contract within different worker types. The data found that relatively high proportions of award-reliant workers employed on a permanent or fixed-term contract worked in Health care and social assistance, while relatively high proportions of award-reliant casual employees worked in Retail trade and Accommodation and food services for both firm sizes. The data also found that patterns of employment within worker types were more likely to vary by employment type than firm size.

Table 6.26 shows that, in contrast with casual employment, non-award-reliant permanent or fixed-term employees were more likely to be employed in Manufacturing, although similar proportions were also reported for award-reliant workers employed in larger firms. While relatively similar proportions of award-reliant and non-award-reliant workers in small firms were employed in Construction on a permanent or fixed-term basis, a higher proportion of non-award-reliant casual employees that worked in this industry were employed in small firms (13 per cent) compared with other worker types.

A higher proportion of award-reliant permanent or fixed-term employees working in small firms were employed in Retail trade (20.7 per cent), with lower but similar proportions found within other worker types. In contrast, a relatively high proportion of casual employees within all worker types were employed in Retail trade. While the highest proportions of these employees were non-award-reliant and working in larger firms (20.1 per cent), similar proportions were reported within the award-reliant worker types.

In addition, a high proportion of award-reliant permanent or fixed-term employees working in larger firms were employed in Accommodation and food services (13.6 per cent). For casual employees, a relatively high proportion of these workers were employed within all worker types in this industry. However, the highest proportions were reported for award-reliant employees working in small (36.5 per cent) and larger (32.1 per cent) firms.

For casual employees, similar proportions of award-reliant and non-award-reliant workers employed in larger firms worked in Administrative and support services, while a relatively high proportion of permanent or fixed-term employees within this industry were award-reliant and working in larger firms, compared with other worker types.

Table 6.26: Proportion of employees within worker types by industry and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Mining	0.1	0.9	0.6	2.7	2.1
Manufacturing	7.3	11.0	9.4	11.6	11.1
Electricity, gas, water and waste services	0.2	0.4	0.4	2.0	1.5
Construction	10.7	14.0	2.1	4.3	6.2
Wholesale trade	4.6	9.3	2.9	5.1	5.7
Retail trade	20.9	7.3	9.8	9.0	9.4
Accommodation and food services	8.1	3.7	13.6	3.3	4.3
Transport, postal and warehousing	2.0	4.4	1.8	5.9	5.2
Information, media and telecommunications	0.2	0.9	1.2	2.7	2.2
Financial and insurance services	0.9	4.6	0.9	6.7	5.6
Rental, hiring and real estate services	4.3	4.6	1.3	1.3	2.1
Professional, scientific and technical services	3.3	17.1	1.3	6.6	8.0
Administrative and support services	3.8	3.9	19.8	3.4	4.5
Education and training	1.6	2.1	7.0	15.2	11.6
Health care and social assistance	16.2	6.5	23.7	16.7	15.3
Arts and recreation services	1.6	1.5	0.8	1.3	1.3
Other services	14.2	7.7	3.5	2.3	4.0
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Casual					
Mining	0.0	0.5	0.0	0.4	0.3
Manufacturing	8.3	5.2	10.6	5.4	6.8
Electricity, gas, water and waste services	0.1	0.3	0.2	0.3	0.2
Construction	1.7	13.0	1.3	3.9	4.9
Wholesale trade	3.2	2.8	3.0	1.9	2.5
Retail trade	15.6	12.7	15.7	20.1	17.1
Accommodation and food services	36.5	13.8	32.1	13.2	20.4
Transport, postal and warehousing	3.9	5.7	2.5	3.5	3.8
	Small award-reliant	**Small non-award-reliant**	**Larger award-reliant**	**Larger non-award-reliant**	**Total**
Information, media and telecommunications	0.4	0.7	0.8	1.7	1.1
Financial and insurance services	0.4	3.3	0.1	1.1	1.2
Rental, hiring and real estate services	3.7	3.1	3.1	0.5	2.0
Professional, scientific and technical services	1.2	8.1	2.0	2.5	3.3
Administrative and support services	6.9	7.5	14.9	15.1	12.3
Education and training	0.8	5.5	2.3	12.1	7.3
Health care and social assistance	8.2	8.3	6.5	12.1	9.7
Arts and recreation services	2.0	3.9	2.9	5.2	4.0
Other services	7.0	5.3	2.1	1.2	3.1
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.27 looks at the distribution of employees working on a casual or permanent or fixed-term contract within industries and across different worker types. The data show that a higher percentage of employees working on a casual basis in Manufacturing (47.7 per cent), Accommodation and food services (56.5 per cent), Rental, hiring and real estate services (53.5 per cent) and Other services (48.1 per cent) were award-reliant than workers employed on a permanent or fixed-term contract.

For Retail trade, similar proportions of workers employed on a casual basis were distributed across most worker types, whereas for permanent or fixed-term employees within this industry, higher percentages were found for workers employed in small firms than for award-reliant employees working in larger firms.

However, for both types of employees, the percentages of workers employed in Rental, hiring and real estate services and Other services were higher in small firms than larger firms. But a majority of workers employed on a casual basis in Construction were non-award-reliant and employed by small firms.

Table 6.27: Proportion of employees across worker types by industry and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Mining	0.0	7.9	1.9	90.2	100.0
Manufacturing	3.5	17.6	5.5	73.3	100.0
Electricity, gas, water and waste services	0.7	5.3	1.3	92.7	100.0
Construction	9.3	39.9	2.2	48.6	100.0
Wholesale trade	4.4	29.2	3.4	63.1	100.0
Retail trade	12.1	13.8	6.8	67.2	100.0
Accommodation and food services	10.3	15.4	20.8	53.7	100.0
Transport, postal and warehousing	2.1	15.1	2.1	80.7	100.0
Information, media and telecommunications	0.5	7.8	3.7	88.5	100.0
Financial and insurance services	0.9	14.6	1.1	83.5	100.0
Rental, hiring and real estate services	11.7	40.3	4.4	44.2	100.0
Professional, scientific and technical services	2.3	38.4	1.0	58.5	100.0
Administrative and support services	4.6	15.2	28.4	51.8	100.0
Education and training	0.8	3.3	4.0	92.1	100.0
Health care and social assistance	5.7	7.6	10.1	76.6	100.0
Arts and recreation services	6.7	20.1	3.7	69.4	100.0
Other services	19.4	34.8	5.8	40.1	100.0
Total	5.4	17.8	6.5	70.2	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Casual					
Mining	0.0	37.0	0.0	66.7	100.0
Manufacturing	18.9	15.5	28.8	36.7	100.0
Electricity, gas, water and waste services	8.7	26.1	13.0	52.2	100.0
Construction	5.5	53.3	4.9	36.5	100.0
Wholesale trade	19.8	22.6	22.2	35.5	100.0
Retail trade	14.1	14.9	16.8	54.2	100.0
Accommodation and food services	27.7	13.5	28.8	30.0	100.0
	Small award-reliant	**Small non-award-reliant**	**Larger award-reliant**	**Larger non-award-reliant**	**Total**
Transport, postal and warehousing	16.0	30.1	11.8	42.1	100.0
Information, media and telecommunications	5.3	12.4	13.3	69.0	100.0
Financial and insurance services	4.9	54.1	1.6	40.2	100.0
Rental, hiring and real estate services	28.5	31.5	28.0	12.0	100.0
Professional, scientific and technical services	5.7	48.5	10.8	34.7	100.0
Administrative and support services	8.7	12.2	22.2	56.9	100.0
Education and training	1.7	15.2	5.8	77.4	100.0
Health care and social assistance	13.1	17.2	12.3	57.4	100.0
Arts and recreation services	7.7	19.7	13.4	59.2	100.0
Other services	35.4	34.4	12.7	17.5	100.0
Total	15.5	20.0	18.3	46.2	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.4.2.1 Industry and permanent or fixed-term employment by sex

Table 6.28 presents the industry composition of male and female employees working on a permanent or fixed-term contract within different worker types. The data show that for award-reliant workers, employment in Retail trade was higher for males than females for both firm sizes. While a high proportion of females employed in this industry were award-reliant and employed by small firms (18.4 per cent), lower proportions were shared within other worker types.

For females, relatively high proportions of employees within all worker types worked in Health care and social assistance. The highest proportions of these workers were award-reliant and working in larger firms (35.3 per cent). For males, a relatively high proportion of employees in small firms worked in Construction.

For males and females, the data show that employees who were award-reliant and working in small firms were more likely to be employed in Other services. Employees who were award-reliant and working in larger firms were more likely to be employed in Administrative and support services, while employees who were non-award-reliant and worked in small firms were more likely to be employed in Professional, scientific and technical services.

Table 6.28: Proportion of permanent/fixed-term employees within worker type by industry and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.0	1.2	1.3	4.6	3.6
Manufacturing	9.7	14.4	17.0	17.6	16.5
Electricity, gas, water and waste services	0.4	0.6	0.7	3.1	2.3
Construction	22.8	19.6	3.8	7.3	10.4
Wholesale trade	6.5	11.6	4.8	6.4	7.4
Retail trade	23.8	7.3	12.8	8.7	9.4
Accommodation and food services	8.5	3.6	12.6	3.4	4.2
Transport, postal and warehousing	3.2	5.7	2.4	8.4	7.3
Information, media and telecommunications	0.0	1.0	1.1	3.2	2.5
Financial and insurance services	0.2	3.4	0.5	5.9	4.9
Rental, hiring and real estate services	3.6	3.2	1.6	1.4	1.9
Professional, scientific and technical services	1.2	14.3	0.5	7.3	8.0
Administrative and support services	3.6	2.3	22.7	3.3	4.2
Education and training	0.4	0.7	4.9	9.2	6.8
Health care and social assistance	0.8	1.2	8.1	6.6	5.3
Arts and recreation services	2.4	1.2	0.7	1.3	1.3
Other services	12.7	8.6	4.0	2.2	4.1
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	0.6	0.0	0.8	0.7
Manufacturing	5.2	6.5	3.7	5.5	5.5
Electricity, gas, water and waste services	0.0	0.2	0.0	0.9	0.7
Construction	0.3	6.7	0.8	1.3	2.0
Wholesale trade	3.2	6.3	1.4	3.7	3.9
Retail trade	18.4	7.1	7.5	9.2	9.3
Accommodation and food services	7.8	3.8	14.4	3.1	4.3
Transport, postal and warehousing	0.8	2.7	1.2	3.5	3.0
Information, media and telecommunications	0.5	0.9	1.3	2.3	1.9
Financial and insurance services	1.5	6.2	1.1	7.5	6.4
Rental, hiring and real estate services	4.9	6.4	1.2	1.2	2.3
Professional, scientific and technical services	5.2	20.7	1.8	5.9	7.9
Administrative and support services	4.0	5.9	17.8	3.4	4.9
Education and training	2.5	4.1	8.6	21.2	16.5
Health care and social assistance	29.3	13.4	35.3	26.8	25.5
Arts and recreation services	0.8	2.0	0.8	1.3	1.4
Other services	15.3	6.6	3.2	2.3	3.8
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

6.4.2.2 Industry and casual employment by sex

Table 6.29 looks at the industry composition of males and females employed on a casual basis within different worker types. The data show that although higher proportions of award-reliant employees worked in Accommodation and food services, relatively high proportions were also found for non-award-reliant workers employed in both small and larger firms. However, these proportions were smaller in comparison.

The data also show that relatively high proportions of female casual workers within all worker types were employed in Retail trade, with higher proportions employed in larger firms than small firms. For males, higher proportions of workers were non-award-reliant and employed in larger firms (17.2 per cent) and award-reliant and employed in small firms (16.2 per cent) compared with other worker types in this industry.

While relatively high proportions of male and female casual workers employed in larger firms were employed in Administrative and support services, a higher proportion of males employed in this industry were award-reliant and employed by small firms (11.8 per cent) than females (4.1 per cent).

Table 6.29: Proportion of casual employees within worker type by industry and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Mining	0.1	0.9	0.0	0.6	0.5
Manufacturing	8.2	6.3	12.8	6.1	7.5
Electricity, gas, water and waste services	0.3	0.5	0.3	0.4	0.4
Construction	4.7	23.8	2.8	6.8	9.2
Wholesale trade	5.5	4.4	3.9	2.5	3.5
Retail trade	16.2	9.5	10.0	17.2	14.4
Accommodation and food services	30.9	13.4	35.1	13.8	19.4
Transport, postal and warehousing	7.6	10.4	3.8	5.3	6.3
Information, media and telecommunications	0.1	0.5	0.8	1.6	1.0
Financial and insurance services	0.0	0.7	0.1	0.9	0.6
Rental, hiring and real estate services	3.9	2.6	2.3	0.6	1.7
Professional, scientific and technical services	1.5	6.8	1.8	2.4	3.1
Administrative and support services	11.8	8.0	14.3	19.0	15.1
Education and training	0.5	3.0	2.2	9.8	6.0
Health care and social assistance	0.8	1.4	4.6	5.5	3.9
Arts and recreation services	0.9	3.5	3.1	5.9	4.4
Other services	7.1	4.5	1.9	1.5	2.9
Total	100.0	100.0	100.0	100.0	100.0

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Female					
Mining	0.0	0.2	0.0	0.1	0.1
Manufacturing	8.4	4.5	9.3	4.7	6.2
Electricity, gas, water and waste services	0.1	0.1	0.1	0.2	0.1
Construction	0.0	5.1	0.3	1.2	1.6
Wholesale trade	1.8	1.6	2.5	1.4	1.7
Retail trade	15.3	15.2	19.2	22.7	19.2
Accommodation and food services	39.7	14.1	30.1	12.7	21.1
Transport, postal and warehousing	1.9	2.4	1.7	1.9	1.9
Information, media and telecommunications	0.6	0.9	0.8	1.8	1.2
Financial and insurance services	0.6	5.2	0.1	1.2	1.7
Rental, hiring and real estate services	3.5	3.6	3.5	0.4	2.2
Professional, scientific and technical services	1.0	9.1	2.1	2.6	3.6
Administrative and support services	4.1	7.1	15.2	11.5	10.1
Education and training	0.9	7.4	2.3	14.3	8.2
Health care and social assistance	12.6	13.4	7.7	18.0	14.1
Arts and recreation services	2.6	4.2	2.9	4.4	3.8
Other services	7.0	5.9	2.3	0.9	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In conclusion, this section found that patterns of employment were more likely to vary by employment type than firm size. For example, the analysis showed that a higher proportion of award-reliant employees working in small firms on a permanent or fixed-term contract were employed in Retail trade, whereas a relatively high proportion of casual employees were found within all worker types in this industry.

The highest proportions of casual employees working in Accommodation and food services were found within the award-reliant worker types, while a high proportion of these employees working on a permanent or fixed-term basis were found to be award-reliant and employed by larger firms.

This section on industries found that the industry profile of worker types is more associated with award reliance than firm size. For example, award-reliant workers employed in small and larger firms were more likely to be employed in Accommodation and food services and Retail trade than non-award-reliant workers. However, for some industries, such as Construction, employees were categorised by firm size more than award reliance.

6.5 Hourly wages

This section compares hourly wages between worker types by labour force characteristics. Using weekly ordinary time cash earnings and weekly ordinary time hours paid for, hourly wages have been derived for non-managerial adult employees across all worker types by occupation and industry. The loading applied to casual wages was subtracted for the comparison.

The results were consistent with other results in the paper that show a greater similarity between award-reliant workers employed in firms of different sizes than with similarities by firm size. The findings are also similar to previous research, outlined in the literature review in Chapter 2, which finds that employees in small firms receive lower wages than employees in larger firms. In this case, as award-reliant workers received lower wages than non-award-reliant workers, award-reliant workers in larger firms had a higher hourly wage than award-reliant workers in small firms. This was also the case for non-award-reliant workers.

Table 6.30 presents data on employee hourly rates by various labour force characteristics. The data show that while award-reliant females received a higher hourly rate compared with award-reliant males, non-award-reliant males received a higher hourly rate than females, particularly among those who worked in larger firms. Furthermore, the data found that compared with workers employed on a casual or part-time basis, award-reliant and non-award-reliant employees that worked full time or as a permanent or fixed-term employee in a larger firm received a relatively higher hourly rate than employees who worked in small firms. Nonetheless, casuals had the lowest hourly wage across all worker types compared with permanent or fixed-term workers.

Table 6.30: Employee hourly rates by labour force characteristics, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Sex					
Male	16.00	25.90	17.80	33.63	29.63
Female	17.28	23.81	18.93	29.25	26.13
Full-time/part-time status					
Full-time	17.14	26.17	19.20	34.08	30.83
Part-time	16.49	22.85	18.01	26.35	23.32
Employment type					
Permanent/fixed	17.77	26.65	19.68	33.27	30.32
Casual	15.54	19.97	17.03	22.24	19.80

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.31 looks at hourly wages by occupation across different worker types. The data show that for all occupations, award-reliant workers earned lower hourly rates relative to non-award-reliant workers, with non-award-reliant workers in larger firms earning the most.

The data also show that across all worker types, the hourly rate of pay was higher for Managers and Professionals and lower for Labourers and Sales workers. The dispersion across occupations within award-reliant workers was not as great as the distribution of hourly rates of pay for non-award-reliant workers. For example, the difference in the hourly rate of pay between Sales workers, Labourers and an occupation group that requires a higher-skilled qualification, such as Technicians and trades workers, was not as large as the pay gap experienced within non-award-reliant worker types, particularly non-award-reliant workers in larger firms.

For employees working as Sales workers, the hourly rate of pay was lower for employees working in larger firms than small firms, with respect to award reliance. Proportional differences across award-reliant workers were not as great as differences in hourly rates of pay for non-award-reliant workers, particularly those employed as Community and personal service workers, Clerical and administrative service workers, Labourers and Technicians and trades workers.

Table 6.31: Employee hourly rates by worker type and occupation, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	23.96	28.74	22.28	45.79	41.82
Professionals	23.23	34.97	31.42	43.29	41.75
Technicians and trades workers	15.49	24.83	16.56	32.19	26.76
Community and personal service workers	17.51	20.61	19.38	24.09	21.78
Clerical and administrative workers	18.14	24.18	18.86	26.91	25.30
Sales workers	16.04	22.56	15.67	20.64	19.80
Machinery operators and drivers	18.08	22.86	18.06	29.71	26.93
Labourers	15.18	19.65	16.62	21.10	19.39

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

Table 6.32 shows that, for all industries, award-reliant workers earned lower hourly rates relative to non-award-reliant workers. For non-award-reliant workers, employment within Accommodation and food services provided the lowest hourly rate of pay and for award-reliant workers employed in Professional, scientific and technical services and Administrative and support services, the data suggested that hourly rates of pay were not associated with firm size. For example, an award-reliant worker employed in a small firm in Administrative and support services was likely to earn a higher hourly rate of pay than an award-reliant worker in a larger firm.

Nevertheless, industries such as Manufacturing, Construction, Education and training, Health care and social assistance and Other services showed that while hourly rates of pay varied by award reliance and firm size, the difference in hourly rates of pay between non-award-reliant workers in small and larger firms was greater than the difference for award-reliant workers. Furthermore, while hourly rates of pay within traditionally low-paid sectors, such as Retail trade and Accommodation and food services varied with firm size and award reliance, the differences in hourly rates of pay across all worker types did not differ as greatly as hourly rates of pay in other industries.

Table 6.32: Employee hourly rates by worker type and industry, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Mining	19.57	37.62	27.98	50.12	48.60
Manufacturing	16.79	24.15	17.85	30.07	27.44
Electricity, gas, water and waste services	19.85	25.78	19.78	38.56	37.18
Construction	17.28	25.38	17.76	35.58	29.56
Wholesale trade	18.17	25.25	17.66	30.19	27.38
Retail trade	17.17	21.52	17.79	23.01	21.47
Accommodation and food services	16.96	19.48	18.37	21.48	19.27
Transport, postal and warehousing	19.54	23.10	19.54	31.10	28.77
Information, media and telecommunications	19.53	27.46	21.13	37.43	35.68
Financial and insurance services	19.83	32.21	19.44	38.67	37.25
Rental, hiring and real estate services	18.54	26.13	17.78	31.33	26.38
Professional, scientific and technical services	18.42	30.05	17.03	37.02	33.42
Administrative and support services	19.36	23.99	17.81	26.80	23.78
Education and training	19.90	25.43	25.78	36.25	35.17
Health care and social assistance	20.03	27.44	23.14	33.39	30.88
Arts and recreation services	17.51	24.07	17.45	25.78	24.27
Other services	18.31	23.23	20.61	28.65	24.13

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2010,* Catalogue No. 6306.0.55.001.

In summary, the analysis found that the difference in hourly wages within worker types was mainly associated with award reliance, with those receiving award wages having lower hourly wages. These results mostly supported previous research findings that workers in larger firms receive a higher wage than workers in small firms.

6.6 Other job and worker characteristics

As noted at the beginning of this chapter, the HILDA survey asks a range of other job-related questions that can provide further distinctions between employees of each worker type. The results further highlight that the similarities between award-reliant workers of both firm sizes were greater than for workers in small firms.

Table 6.33 shows that non-award-reliant workers would choose to work more hours than award-reliant workers, regardless of the firm size they were employed in. However, this distinction between award-reliant and non-award-reliant workers was not evident among the labour force characteristics, except for casuals.

Award-reliant workers in small firms choose to work the lowest number of hours, compared with employees in other worker types, among females and casuals.

Table 6.33: Average number of hours workers would choose to work per week, by worker type and labour force characteristics, hours

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
All	31.8	34.4	31.5	36.8	34.7
Male	37.3	37.4	33.5	39.2	37.8
Female	27.3	29.7	29.9	32.9	30.6
Permanent/fixed-term	37.5	35.8	35.2	37.3	36.7
Casual	26.8	30.6	27.1	33.3	29.0

Note: Data item listed as 'Total hours per week would choose to work'.
Source: HILDA survey, Wave 9 (2009).

The proportion of workers that were with the same employer in Wave 9 as in Wave 8, undertaken one year before in 2008, is reported in Table 6.34. Females, full-time workers and permanent or fixed-term workers were more likely to remain with the same employer, while casuals were the least likely.

Award-reliant workers employed in small firms in Wave 9 were the least likely to remain with the same employer, and non-award-reliant workers in larger firms were the most likely. This was the same for males and females, full-time and part-time workers. Among permanent or fixed-term workers and casuals, the differences were split by firm size.

Table 6.34: Per cent still with same employer from Wave 8, within worker type by labour force characteristics

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
All	77.6	80.3	81.9	86.2	83.0
Male	74.4	78.8	78.0	86.8	82.2
Female	80.8	82.5	84.6	85.4	83.9
Full-time	78.5	80.4	80.2	86.4	83.5
Part-time	76.8	79.6	83.7	86.0	81.8
Permanent/fixed-term	83.3	83.1	87.5	87.6	86.0
Casual	69.8	68.1	71.4	72.2	70.4

Source: HILDA survey, Wave 9 (2009).

Table 6.35 describes the average tenure with workers' current employer. Males, full-time and permanent or fixed-term workers had the longest tenure and casuals the shortest. Award-reliant workers in small firms had the least years of tenure and this was evident for all labour force characteristic except for casuals. Apart from part-time and casuals, workers in small firms had worked for the least number of years with their current employer. For part-time and casual workers, the difference was split by award reliance.

Table 6.35: Years of tenure with current employer, within worker type by labour force characteristics

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
All	3.4	4.8	6.1	6.3	5.5
Male	3.6	4.7	7.0	6.5	5.7
Female	3.1	5.0	5.5	5.9	5.1
Full-time	4.0	4.9	8.8	6.5	6.1
Part-time	2.9	4.6	3.7	5.4	4.1
Permanent/fixed-term	4.0	5.3	8.7	6.6	6.3
Casual	2.6	3.2	2.5	3.5	2.9

Note: Data presented are the number of years employed with current employer in wave 9.
Source: HILDA survey, Wave 9 (2009).

Workers in small firms were the least likely to be union members, with award-reliant workers in small firms the least likely of all the worker types to be union members (Table 6.36). Males were more likely than females to have union membership across each worker type except for award-reliant workers in larger firms. Full-time workers were more likely to be union members than part-time workers except for non-award-reliant workers in larger firms. Permanent or fixed-term workers were more likely to be union members than casuals.

Table 6.36: Union membership, within worker type by labour force characteristics, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
All	6.3	9.5	23.2	21.2	16.3
Male	8.3	11.2	21.3	22.3	17.5
Female	4.5	7.0	24.5	19.4	14.9
Full-time	7.3	9.9	25.7	20.9	17.2
Part-time	5.6	8.2	21.2	22.6	14.6
Permanent/fixed-term	8.8	10.6	31.2	22.0	18.7
Casual	3.5	5.6	11.9	15.3	8.8

Note: Answers of 'don't know' were included as not being union members.
Source: HILDA survey, Wave 9 (2009).

Workers in small firms were likely to have fewer work entitlements (Table 6.37). Some work entitlements were more likely to be offered to workers in larger firms (such as paid maternity leave, carers leave, permanent part-time work), while other entitlements were more likely to be offered to non-award-reliant workers (unpaid maternity leave, parental leave, home-based work, flexible start/finish times).

Table 6.37: Work entitlements within worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Paid maternity leave	21.6	32.5	45.0	60.5	47.0
Unpaid maternity leave	43.7	57.3	59.6	78.4	66.8
Parental leave	37.2	61.8	56.9	79.1	67.2
Special leave for caring for family members	46.2	66.3	66.0	82.9	72.4
Permanent part-time work	66.6	66.0	77.6	76.5	72.8
Home-based work	8.6	20.1	7.9	28.6	20.8
Flexible start/finish times	51.2	57.5	50.5	57.0	55.4
Child care facilities or subsidised child care expenses	6.3	3.9	7.0	7.1	6.2

Source: HILDA survey, Wave 9 (2009).

The highest education level attained within each worker type is shown in Table 6.38. Workers with higher education attainment levels were more likely to be non-award-reliant and employed in larger firms. Award-reliant workers were more likely to have Year 11 or below as their highest education level attained, while a Diploma/Certificate for non-award-reliant workers of both firm sizes was the highest.

Table 6.38: Highest level of education attained within worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Post graduate	1.6	4.5	4.6	11.4	7.2
Bachelor or honours	4.7	12.1	8.2	18.1	13.1
Diploma/Certificate	30.9	36.5	28.7	35.3	34.0
Year 12	26.2	19.9	22.5	18.5	20.6
Year 11 or below	36.6	27.0	36.0	16.6	25.1

Source: HILDA survey, Wave 9 (2009).

In summary, among the worker characteristics examined in this section, some were divided by award reliance and others by firm size. Award-reliant workers were less likely to remain with the same employer in Wave 9 and have lower tenure with their current employer and in their current occupation. They were also more likely to have lower education attainment levels. Workers in small firms were less likely to be union members than workers in larger firms.

6.7 Longitudinal analysis

The HILDA survey has provided information about pay determination for Waves 8 and 9. The longitudinal nature of HILDA enables the tracking of respondents' labour force outcomes over time. In this analysis, it is possible to identify the labour force outcomes in Wave 9 of those respondents employed in Wave 8. In 2009, the Australian Fair Pay Commission awarded no increase to the FMW or award wages. Gross domestic product in Australia increased by 0.9 per cent over the year to the September quarter 2009, and by 2.7 per cent over the year to the December quarter 2009.

Table 6.39 shows that 90.1 per cent of award-reliant workers employed in small firms in Wave 8 were also employed, in any worker type, in Wave 9. While this is the lowest proportion of all the worker types, it is relatively similar to non-award-reliant workers employed in small firms and award-reliant workers in larger firms in Wave 8 (around 90 per cent). Award-reliant workers employed in small firms in Wave 8 were the most likely to be unemployed in Wave 9, more than twice as likely as the next highest worker type (non-award-reliant workers in small firms). Award-reliant workers who were employed in larger firms were least likely to be unemployed in Wave 9, however they recorded the highest proportion of those not in the labour force in Wave 9.

Table 6.39: Wave 9 employment status of respondents employed in Wave 8 by worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Employed	90.1	91.3	91.9	94.8	93.1
Unemployed	5.1	2.3	0.9	1.3	1.8
Not in the labour force	4.8	6.4	7.2	3.9	5.1

Note: Per cent shown. Worker type based on where respondent was employed in Wave 8. Each column sums to 100.
Source: HILDA survey, Waves 8 (2008) and 9 (2009).

Table 6.40 looks at full-time and part-time workers and whether these working arrangements changed between Wave 8 and Wave 9. The results in this table were again separated by award reliant status. Of those respondents employed full time and award reliant in small firms in Wave 8, 87.4 per cent were still employed full time in Wave 9, the lowest of all worker types. The next lowest proportion was for award-reliant employees in larger firms. However, award-reliant workers represented a higher proportion of part-time employees moving to full-time work in Wave 9 than non-award-reliant workers.

Table 6.40: Full-time/part-time status in Wave 9 of those employed in Wave 8 by worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Employed full-time in Wave 8					
Full-time	87.4	92.3	90.4	94.8	93.2
Part-time	12.6	7.7	9.6	5.2	6.8
Employed part-time in Wave 8					
Full-time	19.4	17.1	19.8	17.4	18.3
Part-time	80.6	82.9	80.2	82.6	81.7

Note: Respondents in this sample were employed in both waves and may have changed worker type in Wave 9.
Source: HILDA survey, Waves 8 (2008) and 9 (2009).

We can also undertake this analysis for those employees who remained in the same worker type across both waves. Workers employed on a full-time basis in Wave 8 were more likely to work full-time in Wave 9 if they were non-award-reliant. Table 6.41 shows that workers that were employed part-time in small firms in Wave 8 were less likely to move to full-time work in Wave 9 than those working in larger firms if they remained in the same worker type.

Table 6.41: Full-time/part-time status in Wave 9 of those employed in Wave 8 and remained in same worker type, by worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Full-time	88.7	94.5	89.9	97.1	95.5
Part-time	11.3	5.5	10.1	2.9	4.5
Part-time					
Full-time	15.6	14.9	21.2	23.3	19.9
Part-time	84.4	85.1	78.8	76.6	80.1

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

Table 6.42 shows differences in the transitions between employment type for workers employed in small and larger firms. The table shows that a worker was more likely to be permanent or fixed-term in Wave 9 if they worked in a larger firm. A higher proportion of workers employed on a permanent or fixed-term basis in Wave 8 were employed on a permanent or fixed-term basis in Wave 9 if they were employed in larger firms than for those employed in small firms. For those employed as casuals in Wave 8, a higher proportion of workers in larger firms became employed on a permanent or fixed-term basis than those in small firms.

Table 6.42: Wave 9 employment contract of respondents employed in Wave 8 by worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Permanent/fixed-term	91.3	92.4	95.9	97.1	95.5
Casual	8.7	7.6	4.0	2.9	4.5
Casual					
Permanent/fixed-term	33.2	25.9	34.4	43.0	34.6
Casual	66.8	74.1	65.6	57.0	65.4

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

For those workers who remained in the same worker type across both waves, a lower proportion of casuals moved to permanent or fixed-term employment than the overall (Table 6.43 compared with Table 6.42). However, the results still varied by firm size. Workers were more likely to remain or become permanent or fixed-term if they were employed in larger firms. Award-reliant permanent or fixed-term workers in small firms were the least likely to remain permanent or fixed-term. A higher proportion of award-reliant casual workers in small firms remained casual in Wave 9 than non-award-reliant casuals. Around half of non-award-reliant casuals in Wave 8 employed in larger firms moved to permanent or fixed-term work in Wave 9.

Table 6.43: Wave 9 employment contract of respondents employed in Wave 8 who remained in same worker type, by worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Permanent/fixed-term	89.9	94.9	95.0	98.2	96.8
Casual	10.1	5.1	5.0	1.8	3.2
Casual					
Permanent/fixed-term	18.1	23.4	27.0	49.6	31.6
Casual	81.9	76.6	73.0	50.4	68.4

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

Table 6.44 shows the previous industry of employment in Wave 8 of those who were not employed (either unemployed or not in the labour force) in Wave 9. These figures are affected by the proportion of each worker type within each industry, and in Table 6.45 the analysis is performed across the worker types. Workers employed in Health care and social assistance in Wave 8 comprised a relatively high proportion of those not employed in Wave 9 across all worker types. Of those award-reliant workers employed in small firms in Wave 8 that then were not employed in Wave 9, a relatively high proportion were employed in Wholesale trade and Transport, postal and warehousing. For those that were non-award-reliant and employed in small firms in Wave 8, many were employed in Professional, scientific and technical services and Retail trade. For

award-reliant workers employed in larger firms, relatively high proportions were employed in Construction and Accommodation and food services.

Table 6.44: Wave 8 industry of those not employed in Wave 9, within worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	8.9	1.2	4.5	1.7	3.1
Mining	0.0	0.0	0.0	3.0	1.1
Manufacturing	6.0	4.3	5.2	14.5	8.5
Electricity, gas, water and waste services	0.0	0.9	2.1	1.3	1.2
Construction	8.8	8.3	15.5	2.7	7.7
Wholesale trade	19.7	1.3	1.2	3.1	4.4
Retail trade	5.3	12.6	0.0	7.7	7.3
Accommodation and food services	1.8	9.1	14.5	1.4	6.4
Transport, postal and warehousing	10.7	5.5	0.0	6.0	5.2
Information media and telecommunications	0.0	5.1	1.5	1.0	2.2
Financial and insurance services	2.0	4.9	0.8	8.5	5.0
Rental, hiring and real estate services	0.0	0.0	0.0	0.0	0.0
Professional, scientific and technical services	8.4	15.3	1.5	9.5	9.5
Administrative and support services	5.8	3.6	1.7	2.0	2.9
Public administration and safety	0.0	0.7	3.8	5.6	3.1
Education and training	5.7	4.3	22.4	18.6	13.5
Health care and social assistance	11.8	16.0	22.3	11.3	15.0
Arts and recreation services	0.0	0.0	1.7	0.7	0.6
Other services	5.1	6.9	1.5	1.2	3.4

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

Table 6.45 shows the distribution of those not employed in Wave 9 within the industry classifications rather than the worker types. A relatively high proportion of those who had been employed in Wholesale trade were award-reliant and employed in small firms, while for industries such as Arts and recreation services and Education and training the majority of those not employed in Wave 9 were previously employed in larger firms.

Table 6.45: Wave 8 industry of those not employed Wave 9, across worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant
Agriculture, forestry and fishing	37.8	11.4	29.6	21.2
Mining	0.0	0.0	0.0	100.0
Manufacturing	9.2	14.6	12.5	63.9
Electricity, gas, water and waste services	0.0	21.4	35.9	42.7
Construction	14.9	31.3	40.6	13.1
Wholesale trade	58.9	8.9	5.5	26.6
Retail trade	9.5	50.7	0.0	40.0
Accommodation and food services	3.8	41.8	46.2	8.3
Transport, postal and warehousing	26.5	30.3	0.0	43.3
Information media and telecommunications	0.0	68.7	14.3	17.1
Financial and insurance services	5.2	28.2	3.2	63.5
Rental, hiring and real estate services	0.0	0.0	0.0	0.0
Professional, scientific and technical services	11.6	47.3	3.2	37.9
Administrative and support services	26.1	36.1	11.7	26.1
Public administration and safety	0.0	6.8	24.7	68.8
Education and training	5.5	9.3	33.5	51.7
Health care and social assistance	10.2	31.3	30.1	28.3
Arts and recreation services	0.0	0.0	56.7	43.3
Other services	19.2	58.7	8.7	13.4
Total	13.0	29.2	20.2	37.6

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

The occupation of those employed in Wave 8 who were not employed in Wave 9 is shown in Table 6.46. The distribution among non-award-reliant employees in small firms was relatively even compared with the other worker types, with only Machinery operators and drivers comprising a relatively small proportion. This contrasts with award-reliant workers in small firms in Wave 8 who became not employed in Wave 9, where Machinery operators and drivers comprised the highest proportion. Among the larger firms, Professionals and Clerical and administrative workers comprised a high proportion of the previous industry for those not employed in Wave 9.

Table 6.46: Wave 8 occupation of those not employed Wave 9, within worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	1.9	11.8	1.2	8.7	7.3
Professionals	14.7	17.3	24.8	34.4	24.9
Technicians and trades workers	3.3	15.1	1.5	8.9	8.5
Community and personal service workers	13.0	11.6	24.6	8.5	13.2
Clerical and administrative workers	5.2	21.9	27.4	21.7	20.8
Sales workers	7.9	10.7	5.0	7.5	8.0
Machinery operators and drivers	39.2	0.9	4.2	3.0	7.3
Labourers	14.8	10.6	11.3	7.4	10.1

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

Table 6.47 also describes the previous occupation of those not employed in Wave 9, however the distribution is across the worker types and within the occupations. A higher proportion of those not employed in Wave 9 were previously non-award-reliant and in the Technicians and trades workers, Clerical and administrative workers, Sales workers and Labourers categories. The highest proportion of those previously employed in Wave 8 in Machinery operators and drivers were employed in award-reliant workers in small firms.

Table 6.47: Wave 8 occupation of those not employed Wave 9, across worker type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant
Managers	3.4	47.4	3.4	45.7
Professionals	7.7	20.1	20.0	52.2
Technicians and trades workers	5.1	51.8	3.5	39.6
Community and personal service workers	12.7	25.5	37.5	24.2
Clerical and administrative workers	3.3	30.6	26.5	39.5
Sales workers	12.8	39.0	12.6	35.5
Machinery operators and drivers	69.2	3.7	11.6	15.5
Labourers	19.1	30.5	22.7	27.8
Total	13.0	29.0	20.1	37.9

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

HILDA also asks why the respondent was currently not working, and Table 6.48 provides these results based on their worker type in Wave 8. The most common reason for not working was the category 'got laid off/no work available/retrenched/made redundant' which was the most common across all worker types except for award-reliant workers in larger firms. Workers previously employed in small firms were more likely than workers in larger firms to be not working due to the temporary or seasonal nature of their jobs. Previous non-award-reliant workers were more likely than workers who were previously award-reliant to be not working due to 'pregnancy/to have children'.

Table 6.48: Reason why not working Wave 9, by worker type in Wave 8, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Job was temporary or seasonal	18.3	12.7	3.7	5.8	8.9
Got laid off/No work available/ Retrenched/Made redundant	40.6	29.9	22.7	28.8	29.2
Not satisfied with job (eg. unhappy with hours, pay, working)	4.4	5.1	7.3	4.1	5.1
To obtain a better job/Just wanted a change/To start a new business	0.0	3.1	1.2	0.5	1.3
Retired/Did not want to work any longer	8.7	8.1	5.7	13.5	9.6
Own sickness, disability or injury	5.6	9.4	13.5	8.6	9.5
Pregnancy/To have children	4.3	12.6	6.1	14.4	10.8
To stay at home to look after children/house/someone else	10.6	3.8	3.8	2.1	4.0
Travel/Have a holiday	4.4	1.0	1.4	6.1	3.4
Returned to study/Started study/ Needed more time to study	1.0	5.5	6.3	6.0	5.3
Spouse/partner transferred	0.0	0.0	0.0	0.6	0.2
Too much travel time/Too far from public transport	0.0	4.0	0.0	0.0	1.2
Other	2.0	4.9	28.4	9.5	11.4

Source: HILDA survey, Waves 8 (2008) and 9 (2009).

In summary, award-reliant workers employed in small firms were less likely to be employed in Wave 9 and more likely to be unemployed than other worker types. Award-reliant workers employed in both firm sizes were less likely to remain employed on a full-time basis yet were more likely to move to full-time employment if part-time compared with non-award-reliant workers. Workers in larger firms were more likely to remain or move to permanent or fixed employment than workers in small firms. A higher proportion of previous award-reliant workers in small firms were not employed due to 'got laid off/no work available/retrenched/made redundant'.

6.8 Conclusion

Analysis of the EEH data on the characteristics of employees working within and across various worker types showed that the characteristics of employees working within small businesses were not unique. The analysis found that award-reliant workers employed in small firms resembled award-reliant workers in larger firms more than they resembled non-award reliant workers employed in small firms. However, in some instances, similar proportions of employees within different worker types, such as award-reliant workers in small and larger firms and non-award-reliant workers in small firms, were found within the same industry and/or occupation.

The analysis using EEH data found that:

- award-reliant workers employed in both small and larger firms were relatively more likely to be female, part-time and casual workers than non-award-reliant workers;
- workers types, analysed by occupation and industry, were more associated with award reliance than firm size; and
- based on analysis of hourly wages, award-reliant workers of both firm sizes generally received lower wages than non-award-reliant workers. In most cases among award-reliant workers, those employed in larger firms received higher wages than those employed in small firms, however this was not always demonstrated in the industry analysis. Among non-award-reliant workers, those employed in larger firms received higher hourly wages.

Analysis using HILDA data found that:

- among the other job and worker characteristics, award-reliant workers would choose to work a lower number of hours than non-award-reliant workers, while fewer award-reliant workers had access to parental leave, home-based work and flexible start/finish times;
- employees in small firms were less likely to be with the same employers in Wave 9 as in Wave 8 and had the least tenure with their current employer;
- award wage-reliant workers in small firms were the least likely to be employed and most likely to be unemployed in Wave 9 if also employed in Wave 8 and were less likely to be with the same employers in Wave 9 as in Wave 8;
- transitions between full-time and part-time work were associated with award reliance, with award-reliant workers less likely to remain full-time, although part-time workers were more likely to move to full time if employed in larger firms; and
- a worker was more likely to remain or move to permanent or fixed-term employment if employed in a larger firm.

Based on these results, award-reliant workers employed in small firms have similar characteristics to award-reliant workers employed in larger firms. To the extent that these employee characteristics are determinants driving employer responses to adjustments in award wages, it is reasonable to assume from this observation that increases in award wages are unlikely to affect award-reliant workers in small firms very differently from award-reliant workers in larger firms, noting that employee characteristics will be only one of a number of drivers of an employer response. However, data limitations prevent empirical testing to determine the impact of award wage adjustments on small businesses.

7 Conclusion

This report examined the performance and characteristics of small businesses, with particular reference to small award-reliant businesses and their employees. A comparison between business types and their employees was conducted to assess, where possible, if award wage increases may have a differential impact on small award-reliant businesses.

In the absence of rich firm-level data, the research report was unable to determine the impact, if any, of award wage adjustments on small businesses. Although the inclusion of the BLD provided some insight into the performance and characteristics of small award-reliant firms compared with small non-award-reliant firms and small firms that use a combination of award and non-award arrangements, the direction of causality remains ambiguous, as the data highlight only associations between award-reliant businesses and their performance. The lack of employment and financial data, as well as concerns about the pay-setting variable in the BLD, also posed limitations on the analysis.

In light of these data limitations, the report included data drawn from the HILDA and EEH surveys to analyse characteristics of workers employed by the firm types of interest. As a result, this report provided an extensive amount of data on the characteristics of award-reliant employees of small firms and compared these with the characteristics of employees of other worker types. However, data limitations also affected the analysis of these datasets.

An overview of the general characteristics of small businesses showed that, while around 90 per cent of employing businesses were small businesses, they accounted for only around one-third of employees and one-third of total operating profits before tax for employing businesses. In addition, trends between 2002–03 and 2005–06 revealed that, while small businesses experienced the largest growth in industry value added, wages and, in particular, profit growth per business were low relative to other employing businesses. Small businesses also exhibited higher entry and exit rates.

The lack of quality micro firm-level data was also reflected in the limited number of Australian studies and, as a result, the literature review cited a large amount of evidence that stemmed from international sources. Since most domestic studies did not provide empirical evidence on the potential impact of award wage increases on small firms, studies drawn from the UK and US were included to provide some discussion of minimum wages in the context of small businesses.

The literature review also surveyed papers that examined the effects of firm size on wage levels and indicators of performance, such as productivity, profitability and firm survival, including employment dynamics. These variables were reviewed because firms' responses to wage adjustments could encompass changes to one or more of these variables, and the impact could differ between small and larger firms. Indeed, some international studies suggested that differences in management structure were linked to firm size and higher rates of job loss were found in small firms. However, the findings on productivity and business failure rates were inconclusive.

Analysis of the BLD revealed that small award-reliant only businesses accounted for 12.9 per cent of small employing businesses in 2005–06. Relative to small businesses that utilised non-award arrangements and a combination of award and non-award arrangements, small award-reliant only businesses were less likely to exhibit increased productivity and profitability. Small award-reliant only businesses also experienced lower survival rates relative to their counterparts. Furthermore, the data also showed that the majority of small award-reliant only businesses that use awards tended only to move towards using non-awards or a combination of both over time. However, the subjective nature of productivity, profitability and competition measures in the BLD adds some uncertainty about the robustness of these findings and the direction of causality remains ambiguous, as these data highlight only associations between award-reliant businesses and their performance.

An analysis of the EEH and HILDA surveys on employees of small award-reliant firms and other worker types showed that, in most of the analysis, the characteristics of employees working within each worker type were more likely to vary by award reliance than firm size. In effect, the analysis suggests that employees of small businesses were not defined by a unique set of characteristics. For example, while certain occupations and industries can be categorised by award reliance, in some instances similar proportions of employees within different worker types, such as award-reliant workers in small and larger firms, and non-award-reliant workers in small firms, were found within the same industry and/or occupation.

While it is not possible to test the impact of adjustments made to award wages on small businesses empirically, particularly by determining causality between firm size and the explanatory variables used to assess labour force characteristics, the analysis found that, in most cases, the characteristics of award-reliant workers employed in small firms were similar to award-reliant workers employed in larger firms. To the extent that these employee characteristics are determinants driving employer responses to adjustments in award wages, it is reasonable to assume from this observation that increases in award wages are unlikely to impact award-reliant workers in small firms very differently from award-reliant workers in larger firms, noting that employee characteristics will be only one of a number of drivers of an employer response.

These surveys, however, are not a substitute for firm-level data and this report would have benefited from a well designed and extensive business survey. Further, in the forthcoming release of the BLD, an analysis of firm-level data in the context of minimum wage setting cannot be conducted in light of the omission of the method of pay-setting variable. Hence, the creation of a LEED in Australia is important to aid minimum wages research, as information collected on businesses and employees will provide better informed research on business performance and trends in employment arrangements over time.

Bibliography

Agell J (2004), 'Why are Small Firms Different? Managers' Views', *Scandinavian Journal of Economics*, vol. 106, no. 3, pp. 437–452.

Arrowsmith J, Gilman M, Edwards P and Ram M (2003), 'The Impact of the National Minimum Wage in Small Firms', *British Journal of Industrial Relations*, vol. 41, no. 3, pp. 435–456.

Atkinson J (1984), *Flexibility, Uncertainty and Manpower Management,* IMS Report No. 89, Institute of Manpower Studies, Brighton.

Australian Bureau of Statistics (2007), *Explorations of Innovation and Business Performance Using Linked Firm-Level Data,* Research Paper, Catalogue No. 1351.0.55.020, ABS, Canberra.

Australian Bureau of Statistics (2005), *A Statistical View of Counts of Businesses in Australia,* Information Paper, Catalogue No. 8162.0, ABS, Canberra.

Australian Bureau of Statistics (2002), *Small Business in Australia,* various editions, Catalogue No. 1321.0, ABS, Canberra.

Belfield C and Wei X (2004), 'Employer size-wage effects: evidence from matched employer-employee survey data in the UK, *Applied Economics*, vol. 36, issue 3, pp. 185–193.

Bickerdyke I, Lattimore R and Madge A (2000), *Business failure and change: an Australian perspective*, Staff research paper, Productivity Commission, Canberra.

Buultjens J (2003), 'Employment Relations in Small Business: A Case Study of Registered Clubs in New South Wales', *International Journal of Employment Studies*, vol. 11, issue 1, pp. 31–54, April.

Buultjens J and Orme F (2002), *Industrial Relations Reform and the Small Business Sector*, viewed 31 March 2011, www.australianreview.net/journal/v3/n2/buultjens_orme.pdf.

Buultjens J (1994), 'Labour Market Deregulation: Does Small Business Care?', *International Journal of Employment Studies*, vol. 2, no. 1, pp. 132–157.

Brown C and Medoff J (1989), 'The Employer Size–Wage Effect', *Journal of Political Economy*, vol. 97, no. 5, pp. 1027–1059.

Card D and Krueger A (1994), 'Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania', *American Economic Review*, vol. 84, no. 5, pp. 772–793.

Card D and Krueger A (2000), 'Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania: Reply', *American Economic Review*, vol. 90, no. 5, pp. 1397–1420.

Draca M, Machin S and Van Reenen J (2006), *Minimum Wages and Firm Profitability,* Centre for Economic Performance Discussion Paper No. 715, London School of Economics, London.

Evans DS and Leighton LS (1989), 'Why do smaller firms pay less?', *Journal of Human Resources*, vol. 24, no. 2, pp. 299–318.

Evesson J, Oxenbridge S, Schutz H, Baldwin S, Moensted M and Buchanan J (2011), *Enterprise Case Studies: Effects of minimum wage-setting at an enterprise level*, commissioned by Fair Work Australia, Research Report 7/2010.

Farmakis-Gamboni S and Yuen K (2011), 'An overview of productivity, business competitiveness and viability' Research report 1/2011, Fair Work Australia, Melbourne.

Ferrer A and Lluis S (2008), 'Should workers care about firm size?', *Industrial & Labour Relations Review*, vol. 62, issue 1, pp. 104–124.

Fiscal Policy Institute (2004), *State Minimum Wages and Employment in Small Businesses,* viewed at 31 March 2010, http://www.fiscalpolicy.org/press_040421.stm

Forsaith D, Fuller D, Pattinson W, Sutcliffe P and Callachor J (1994), 'Australian Evidence on the Interchangeability of Definitions of a Small Enterprise', *Australian Bulletin of Labour*, vol. 21, no. 2, pp. 109–118.

Forster-Holt N (2009), 'What Makes a Business "Small"?', *Strategic Finance*, vol. 90, Issue 9, pp. 20–22.

Garen JE (1985), 'Worker Heterogeneity, Job Screening and Firm Size', *Journal of Political Economy*, vol. 93, issue 4, pp. 715–739.

Gilman M, Edwards P, Ram M and Arrowsmith J (2002), 'Pay determination in small firms in the UK: the case of the response to the National Minimum Wage', *Industrial Relations Journal,* vol. 33, no. 1, pp. 52–67.

Haltiwanger JC, Lane JI and Speltzer JR (1999), 'Productivity Differences Across Employers: The Role of Employer Size, Age and Human Capital', *American Economic Review*, vol. 89, issue. 2, pp. 94–98.

Harding D and Harding G (2004a), *Minimum Wages in Australia: Theory, Evidence and Policy Implications,* The University of Melbourne, viewed at 1 April 2011, http://www.cama.anu.edu.au/macroworkshop/Don%20Harding.pdf.

Harding D and Harding G (2004b), *Minimum Wages in Australia: An Analysis of the Impact on Small and Medium Sized Businesses,* Australia, Turning Point Research Pty Ltd.

Haswell S and Holmes S (1989), 'Estimating the Small Business Failure Rate: A Reappraisal', *Journal of Small Business Management,* vol. 27, no. 3, pp. 68–74.

Healy J, McDonald I, Macaitis K, Mavromaras, K and Sloane P (2011), *Research framework and data strategy*, commissioned by Fair Work Australia, Research Report 4/2011.

Helfand J, Sadeghi A and Talan D (2007), 'Employment dynamics: small and large firms over the business cycle', *Monthly Labor Review,* March, vol. 130, no. 3, pp. 39–50.

Hettler P (2007), 'The Decomposition of Firm-size Wage Differentials', *Journal of Labor Research*, vol. 28, issue 3, pp. 477–486.

Heyes J and Gray A (2004), 'Small Firms and the National Minimum Wage', *Policy Studies*, vol. 25, no. 3, pp. 209–225.

Heyes J and Gray A (2003), 'The implications of the national minimum wage for training in small firms', *Human Resource Management Journal,* vol. 13, no. 2, pp. 76–86.

Juniper J, Mitchell W and Myers J (2004), *Small business employment dynamics in Australia,* Centre of Full Employment and Equity, Working Paper No. 04–10.

Katz L and Krueger A (1992), 'The effect of the minimum wage on the fast food industry', *Industrial and Labor Relations Review*, vol. 46, no. 1, pp. 6–21.

Levin-Waldman O and McCarthy G W (1998), *Small Business and the Minimum Wage,* viewed 31 March 2011, http://www.levyinstitute.org/pubs/pn/pn98_3.pdf

McGuiness S, Webster E and Mavromaras K (2006), *What are the Characteristics of the Employers of the Low Paid in Australia*, Research Report No. 3/06, Report commissioned by the Australian Fair Pay Commission, October.

Morrissette R (1993), 'Canadian jobs and firm size: Do smaller firms pay less?', *Canadian Journal of Economics*, vol. 26, issue 1, pp. 159–174.

Neumark D and Wascher W (2000), 'The effect of New Jersey's minimum wage increase on fast-food employment: A reevaluation using payroll records', *American Economic Review*, vol. 90, no. 5, pp. 1362–1396.

Neumark D and Wascher WL (2007), 'Minimum Wages and Employment', *Foundations and Trends in Microeconomics,* vol. 3, issue 1–2.

Oi WY (1990), 'Employment Relations in Dual Labor Markets ("It's Nice Work If You Can Get It"), *Journal of Labor Economics*, vol. 8, no. 1, pp. 124–149.

Pearce JE (1990), 'Tenure, Unions, and the Relationship between Firms Size and Wages', *Journal of Labor Economics*, vol. 8, no. 2, pp. 251–269.

Pedace R (2010), 'Firm Size-Wage Premiums: Using Employer Data to Unravel the Mystery', *Journal of Economic Issues*, vol. 44, no. 1, pp. 163–181.

Revesz J and Lattimore R (1997), *Small Business Employment,* Industry Commission Staff Research Paper, Canberra.

Rizov M and Croucher R (2011), *The impact of the UK national minimum wage on productivity by low-paying sectors and firm-size groups,* Middlesex University Business School, Report to the Low Pay Commission, March.

Rogers M (1998), *The Definition and Measurement of Productivity*, Melbourne Institute Working Paper No. 9/98.

Rogers M (1999), *The Performance of Small and Medium Enterprises: An Overview Using the Growth and Performance Survey*, Melbourne Institute Working Paper No. 1/99.

Sabia JJ (2006), *The Effect of Minimum Wage Increases on Retail and Small Business Employment*, Employment Policies Institute, Washington DC.

Senate Employment, Workplace Relations and Education References Committee (2003), *Small business employment*, Senate Printing Unit, Department of the Senate, Parliament House, Canberra.

Spriggs W and Klein B (1994), *Raising the floor: The effects of the minimum wage on low-wage workers*, Washington DC: Economic Policy Institute, 1994.

Troske KR (1999), 'Evidence on the Employer Size-Wage Premium from Worker-Establishment Matched Data', *Review of Economics and Statistics*, vol. 81, no. 1, pp. 15–26.

Watson J and Everett J E (1996), 'Do Small Businesses Have High Failure Rates? Evidence from Australian Retailers', *Journal of Small Business Management,* vol. 34, issue. 4, pp. 45–62.

Weiss A and Landau HJ (1984), 'Wages, Hiring Standards and Firm Size', *Journal of Labor Economics*, vol. 2, no. 4, pp. 477–499.

Wilkins R and Wooden M (2011), *Measuring Minimum Award Wage Reliance in Australia: The HILDA Survey Experience*, Melbourne Institute Working Paper Series, Working Paper No. 11/11.

Wooden M (2010), 'An unfair safety net?', *Australian Bulletin of Labour*, Vol. 36, No. 3.

Appendix 1—Analysis of employees working in small businesses using EEH

Table A1.1: Proportion of employees within worker type by employment type and sex, per cent

	Small award-reliant		Small non-award-reliant		Larger award-reliant		Larger non-award-reliant		Total	
	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Permanent/fixed-term	50.5	54.1	79.2	74.9	55.0	54.4	83.9	83.6	75.3	77.0
Casual	49.4	45.9	20.9	25.1	45.0	45.6	16.1	16.4	24.7	23.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male										
Permanent/fixed-term	59.6	59.4	82.8	79.9	58.9	56.9	87.3	84.2	80.9	79.6
Casual	40.4	40.6	17.2	20.1	41.1	43.1	12.7	15.8	19.1	20.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female										
Permanent/fixed-term	44.6	50.2	74.5	69.3	52.4	52.7	79.5	83.0	69.3	74.5
Casual	55.4	49.8	25.5	30.7	47.6	47.3	20.5	17.0	30.7	25.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2006 and 2010, Catalogue No. 6306.0.55.001.*

Table A1.2: Proportion of part-time employees within worker type by occupation and sex, per cent

	Small award-reliant		Small non-award-reliant		Larger award-reliant		Larger non-award-reliant		Total	
	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Male										
Managers	0.0	0.2	3.2	2.5	0.0	0.1	0.6	1.1	0.9	1.1
Professionals	1.9	0.7	11.0	9.8	1.6	1.6	11.0	16.0	7.3	10.8
Technicians and trades workers	6.4	16.0	12.9	15.0	3.7	3.2	5.7	4.8	6.7	7.8
Community and personal service workers	20.0	15.5	10.6	8.7	26.6	24.5	11.8	16.1	16.5	16.0
Clerical and administrative workers	4.0	5.1	13.1	11.0	2.6	4.8	8.0	6.5	7.1	6.9
Sales workers	34.1	15.7	8.7	11.1	19.6	14.9	30.9	21.7	24.3	18.0
Machinery operators and drivers	11.0	11.6	11.9	13.2	6.7	8.6	7.2	7.6	8.6	9.2
Labourers	22.5	35.3	28.7	28.7	39.1	42.3	24.7	26.1	28.8	30.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	Small award-reliant		Small non-award-reliant		Larger award-reliant		Larger non-award-reliant		Total	
Female										
Managers	1.3	0.6	1.6	2.3	0.1	0.2	1.2	1.6	1.0	1.4
Professionals	2.0	4.3	13.0	14.7	7.6	5.7	16.9	27.2	11.6	19.2
Technicians and trades workers	4.2	5.2	4.0	3.2	1.6	1.8	2.4	2.0	2.8	2.6
Community and personal service workers	26.9	35.3	15.7	14.1	33.6	38.3	17.6	22.5	22.6	24.8
Clerical and administrative workers	18.4	13.5	46.3	40.8	10.1	9.0	17.7	17.2	21.2	19.7
Sales workers	30.6	25.0	11.0	13.3	25.6	21.2	30.9	19.3	25.9	19.2
Machinery operators and drivers	1.5	1.0	0.4	0.9	1.0	1.2	1.2	0.7	1.1	0.9
Labourers	15.2	15.1	8.0	10.7	20.4	22.6	12.1	9.4	13.9	12.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2006 and 2010, Catalogue No. 6306.0.55.001.*

Table A1.3: Proportion of casual employees within worker type by occupation and sex, per cent

	Small award-reliant		Small non-award-reliant		Larger award-reliant		Larger non-award-reliant		Total	
	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Male										
Managers	0.0	0.2	1.0	2.1	0.1	0.1	0.6	0.3	0.5	0.6
Professionals	0.7	0.7	3.8	4.7	1.1	0.9	7.7	11.8	4.1	7.1
Technicians and trades workers	8.6	18.3	13.9	16.7	5.5	4.9	11.4	7.7	10.0	10.4
Community and personal service workers	16.3	13.7	9.2	8.4	22.4	26.8	8.4	11.4	13.3	13.6
Clerical and administrative workers	3.2	5.9	9.7	7.8	3.5	7.7	7.6	5.5	6.4	6.3
Sales workers	34.5	12.0	8.3	8.2	20.2	15.5	22.6	19.2	20.8	15.5
Machinery operators and drivers	13.2	14.3	21.7	19.4	11.8	12.6	12.6	14.7	14.4	15.2
Labourers	23.4	35.0	32.2	32.8	35.4	31.5	29.2	29.5	30.5	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	Small award-reliant		Small non-award-reliant		Larger award-reliant		Larger non-award-reliant		Total	
Female										
Managers	0.7	0.2	0.2	1.3	0.1	0.1	0.1	0.5	0.2	0.5
Professionals	0.8	2.9	9.6	11.5	4.0	3.7	8.2	19.6	5.6	11.9
Technicians and trades workers	4.4	4.4	3.7	3.2	1.7	1.6	2.1	1.4	2.8	2.3
Community and personal service workers	25.9	33.1	22.7	17.5	30.3	37.3	17.2	20.1	23.8	25.2
Clerical and administrative workers	14.3	10.4	36.1	30.8	11.3	9.6	14.3	12.7	17.0	15.4
Sales workers	35.0	28.5	14.3	18.4	32.8	27.9	41.3	30.2	33.0	27.1
Machinery operators and drivers	1.7	1.5	0.8	2.0	1.7	2.1	2.4	1.9	1.8	1.9
Labourers	17.2	18.8	12.5	15.3	18.2	17.6	14.4	13.7	15.8	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ABS, *Employee, Earnings and Hours, Expanded CURF, 2006 and 2010, Catalogue No. 6306.0.55.001.*

Appendix 2—Analysis of employees working in small businesses using HILDA

Table A2.1: Labour force characteristics within worker type by sex and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Sex					
Male	47.5	58.6	42.7	60.5	55.4
Female	52.5	41.4	57.3	39.5	44.6
Total	100.0	100.0	100.0	100.0	100.0
Full-time/part-time status					
Full-time	45.5	70.6	47.6	81.1	68.2
Part-time	54.5	29.4	52.4	18.9	31.8
Total	100.0	100.0	100.0	100.0	100.0
Male					
Full-time	64.1	84.0	63.4	90.6	82.4
Part-time	35.9	16.0	36.6	9.4	17.6
Female					
Full-time	28.6	51.6	35.7	66.5	50.5
Part-time	71.4	48.4	64.3	33.5	49.5

Source: HILDA survey, Wave 9 (2009).

Table A2.2: Labour force characteristics across worker type by sex and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Sex					
Male	12.5	27.1	11.6	48.8	100.0
Female	17.1	23.8	19.4	39.7	100.0
Full-time/part-time status					
Full-time	9.7	26.5	10.5	53.3	100.0
Part-time	24.9	23.7	24.8	26.7	100.0
Male					
Full-time	9.7	27.6	8.9	53.8	100.0
Part-time	25.3	24.6	24.1	26	100.0
Female					
Full-time	9.7	24.3	13.7	52.4	100.0
Part-time	24.7	23.3	25.1	26.9	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.3: Labour force characteristics within worker type by employment type and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term	53.9	77.5	58.3	88.0	75.9
Casual	46.1	22.5	41.7	12.0	24.1
Total	100.0	100.0	100.0	100.0	100.0
Male					
Permanent/fixed-term	62.1	80.6	62.1	89.1	80.3
Casual	37.9	19.4	37.9	10.9	19.7
Female					
Permanent/fixed-term	46.5	73.0	55.5	86.3	70.4
Casual	53.5	27.0	44.5	13.7	29.6
ABS definitions					
Permanent	50.2	69.2	57.9	85.4	72.0
Casual	49.8	30.8	42.1	14.6	28.0

Source: HILDA survey, Wave 9 (2009).

Table A2.4: Labour force characteristics across worker type by employment type and sex, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term	10.3	26.1	11.6	52	100.0
Casual	27.7	23.8	26.1	22.3	100.0
Male					
Permanent/fixed-term	9.6	27.2	9.0	54.2	100.0
Casual	23.9	26.6	22.4	27.1	100.0
Female					
Permanent/fixed-term	11.3	24.6	15.3	48.8	100.0
Casual	30.9	21.5	29.2	18.4	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.5: Proportion of employees within worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	3.8	12.3	4.3	13.1	10.2
Professionals	5.6	15.1	9.9	24.5	17.1
Technicians and trades workers	22.9	19.6	8.9	14.6	16.2
Community and personal service workers	15.5	6.4	17.1	5.5	9.0
Clerical and administrative workers	9.2	19.5	10.7	16.8	15.5
Sales workers	21.3	11.9	22.6	8.7	13.5
Machinery operators and drivers	5.9	8.2	7.4	7.5	7.4
Labourers	15.8	7.1	19.1	9.3	11.1
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.6: Proportion of employees across worker type by occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	5.4	30.8	6.3	57.5	100.0
Professionals	4.8	22.5	8.7	64.0	100.0
Technicians and trades workers	20.6	30.9	8.2	40.3	100.0
Community and personal service workers	25.2	18.4	28.9	27.5	100.0
Clerical and administrative workers	8.6	32.3	10.5	48.6	100.0
Sales workers	23.0	22.6	25.4	29.0	100.0
Machinery operators and drivers	11.6	28.2	15.1	45.1	100.0
Labourers	20.6	16.4	25.8	37.2	100.0
Total	14.5	25.6	15.1	44.8	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.7: Proportion of employees within worker type by sex and occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	4.2	14.0	6.4	15.6	12.7
Professionals	4.3	15.1	4.4	23.3	16.5
Technicians and trades workers	38.1	29.1	18.5	21.5	25.3
Community and personal service workers	7.9	4.2	9.4	3.7	5.0
Clerical and administrative workers	2.4	6.7	6.6	8.2	6.9
Sales workers	10.4	8.4	17.3	6.9	9.0
Machinery operators and drivers	11.3	12.0	14.6	11.1	11.7
Labourers	21.3	10.5	22.8	9.8	12.9
Total	100.0	100.0	100.0	100.0	100.0
Female					
Managers	3.4	9.8	2.6	9.4	7.1
Professionals	6.8	15.0	14.0	26.4	17.9
Technicians and trades workers	9.1	6.1	1.7	4.0	4.9
Community and personal service workers	22.3	9.5	22.9	8.3	13.8
Clerical and administrative workers	15.3	37.6	13.8	29.9	26.1
Sales workers	31.1	16.8	26.6	11.5	19.1
Machinery operators and drivers	1.1	2.8	2.1	2.0	2.1
Labourers	10.8	2.4	16.3	8.5	8.9
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.8: Proportion of employees across worker type by sex and occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male					
Managers	4.2	29.9	5.9	60.0	100.0
Professionals	3.2	24.8	3.1	68.9	100.0
Technicians and trades workers	18.8	31.1	8.5	41.5	100.0
Community and personal service workers	19.7	22.8	21.7	35.8	100.0
Clerical and administrative workers	4.4	26.3	11.2	58.2	100.0
Sales workers	14.5	25.5	22.5	37.5	100.0
Machinery operators and drivers	12.0	27.6	14.5	46.0	100.0
Labourers	20.6	21.9	20.6	36.9	100.0
Total	12.5	27.1	11.6	48.8	100.0
Female					
Managers	8.2	32.6	7.1	52.0	100.0
Professionals	6.5	19.9	15.1	58.5	100.0
Technicians and trades workers	31.7	29.5	6.5	32.3	100.0
Community and personal service workers	27.7	16.4	32.2	23.8	100.0
Clerical and administrative workers	10.0	34.3	10.2	45.5	100.0
Sales workers	28.0	20.9	27.1	24.0	100.0
Machinery operators and drivers	9.0	32.5	19.8	38.8	100.0
Labourers	20.6	6.4	35.3	37.7	100.0
Total	17.1	23.8	19.4	39.7	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.9: Proportion of workers within worker type by occupation and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Managers	6.8	15.8	7.0	15.7	14.0
Professionals	7.6	16.1	14.3	25.8	20.3
Technicians and trades workers	42.6	24.4	14.7	16.6	21.0
Community and personal service workers	6.9	3.7	11.3	3.6	4.7
Clerical and administrative workers	7.9	14.1	13.9	16.6	14.8
Sales workers	9.9	9.6	8.6	6.2	7.7
Machinery operators and drivers	9.0	10.2	13.1	8.1	9.3
Labourers	9.2	6.0	17.1	7.6	8.3
Total	100.0	100.0	100.0	100.0	100.0
Part-time					
Managers	1.3	3.9	1.8	2.3	2.3
Professionals	4.0	12.7	5.7	19.4	10.6
Technicians and trades workers	6.6	7.8	3.7	6.3	6.1
Community and personal service workers	22.8	13.0	22.5	13.1	17.8
Clerical and administrative workers	10.3	31.8	8.0	17.7	16.8
Sales workers	30.8	17.5	35.1	19.8	25.8
Machinery operators and drivers	3.3	3.4	2.4	5.0	3.5
Labourers	20.9	9.8	20.9	16.4	17.1
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.10: Proportion of workers across worker type by occupation and full-time/part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Full-time					
Managers	4.8	30.0	5.3	59.9	100.0
Professionals	3.7	21.1	7.4	67.8	100.0
Technicians and trades workers	19.7	30.9	7.3	42.0	100.0
Community and personal service workers	14.1	20.9	24.9	40.1	100.0
Clerical and administrative workers	5.2	25.3	9.9	59.7	100.0
Sales workers	12.5	33.1	11.8	42.6	100.0
Machinery operators and drivers	9.5	29.2	14.8	46.5	100.0
Labourers	10.7	19.2	21.5	48.6	100.0
Total	9.7	26.5	10.5	53.3	100.0
Part-time					
Managers	14.1	40.3	19.4	26.2	100.0
Professionals	9.3	28.3	13.3	49.1	100.0
Technicians and trades workers	27.1	30.4	15.1	27.4	100.0
Community and personal service workers	31.9	17.2	31.3	19.6	100.0
Clerical and administrative workers	15.3	44.7	11.8	28.2	100.0
Sales workers	29.7	16.1	33.7	20.5	100.0
Machinery operators and drivers	22.8	22.7	16.9	37.6	100.0
Labourers	30.5	13.6	30.3	25.6	100.0
Total	24.9	23.7	24.8	26.7	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.11a: Proportion of workers within worker type by occupation, sex and full-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male Full-time					
Managers	6.4	16.5	9.0	17.1	15.1
Professionals	4.1	15.0	6.6	24.4	18.2
Technicians and trades workers	56.0	31.3	24.5	22.6	28.4
Community and personal service workers	1.1	2.2	5.2	2.6	2.6
Clerical and administrative workers	3.0	5.9	7.7	8.1	7.0
Sales workers	5.4	8.8	9.7	6.0	7.1
Machinery operators and drivers	12.3	12.5	19.1	11.0	12.3
Labourers	11.7	7.9	18.2	8.2	9.3
Total	100.0	100.0	100.0	100.0	100.0
Female Full-time					
Managers	7.8	14.2	4.4	12.8	11.5
Professionals	14.8	18.8	24.7	28.6	24.3
Technicians and trades workers	15.5	8.6	1.5	3.8	5.8
Community and personal service workers	18.6	7.3	19.4	5.6	9.2
Clerical and administrative workers	17.8	33.1	22.3	34.3	30.8
Sales workers	19.2	11.4	7.2	6.4	9.0
Machinery operators and drivers	2.4	4.7	4.9	2.1	3.1
Labourers	4.0	1.8	15.5	6.4	6.3
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.11b: Proportion of workers within worker type by occupation, sex and part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male Part-time					
Managers	0.4	1.0	2.1	1.3	1.2
Professionals	4.6	16.1	0.7	12.7	8.6
Technicians and trades workers	6.6	17.1	8.2	10.5	10.6
Community and personal service workers	20.2	15.2	16.0	14.2	16.4
Clerical and administrative workers	1.4	10.7	4.7	9.1	6.5
Sales workers	19.5	6.6	30.6	15.2	17.9
Machinery operators and drivers	9.1	9.1	6.7	12.1	9.3
Labourers	38.3	24.2	30.9	24.8	29.6
Total	100.0	100.0	100.0	100.0	100.0
Female Part-time					
Managers	1.7	5.3	1.7	2.7	2.8
Professionals	3.7	11.1	7.8	22.3	11.5
Technicians and trades workers	6.7	3.5	1.7	4.4	4.1
Community and personal service workers	24.0	12.0	25.3	12.6	18.5
Clerical and administrative workers	14.5	41.7	9.4	21.4	21.4
Sales workers	36.0	22.6	37.0	21.8	29.3
Machinery operators and drivers	0.6	0.8	0.6	1.9	1.0
Labourers	12.9	3.1	16.6	12.8	11.5
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.12: Proportion of employees within worker type by occupation and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/Fixed-term					
Managers	6.6	15.3	5.7	14.6	12.9
Professionals	10.1	16.9	15.0	26.2	20.8
Technicians and trades workers	33.4	21.3	12.0	15.1	18.2
Community and personal service workers	10.3	4.1	14.5	4.2	6.0
Clerical and administrative workers	9.5	19.5	13.9	17.1	16.6
Sales workers	14.3	9.3	14.3	7.6	9.5
Machinery operators and drivers	6.4	8.6	8.7	7.6	7.9
Labourers	9.5	5.1	15.9	7.5	8.1
Total	100.0	100.0	100.0	100.0	100.0
Casual					
Managers	0.6	2.0	2.3	2.4	1.8
Professionals	0.3	8.6	2.8	12.4	5.6
Technicians and trades workers	10.3	13.5	4.4	11.0	9.7
Community and personal service workers	21.7	14.5	20.8	15.3	18.3
Clerical and administrative workers	8.9	19.5	6.3	14.5	12.0
Sales workers	29.5	20.7	34.2	16.6	25.8
Machinery operators and drivers	5.4	6.8	5.7	6.3	6.0
Labourers	23.3	14.3	23.5	21.5	20.8
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.13: Proportion of employees across worker type by occupation and employment type, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Permanent/fixed-term					
Managers	5.3	30.9	5.1	58.7	100.0
Professionals	5.0	21.2	8.4	65.4	100.0
Technicians and trades workers	18.9	30.5	7.6	43.0	100.0
Community and personal service workers	17.7	18.0	28.1	36.2	100.0
Clerical and administrative workers	5.9	30.7	9.8	53.7	100.0
Sales workers	15.5	25.4	17.5	41.6	100.0
Machinery operators and drivers	8.4	28.6	12.8	50.2	100.0
Labourers	12.1	16.5	22.9	48.5	100.0
Total	10.3	26.1	11.6	52.0	100.0
Casual					
Managers	9.1	27.3	33.5	30.0	100.0
Professionals	1.6	36.1	13.0	49.4	100.0
Technicians and trades workers	29.6	33.1	12.0	25.4	100.0
Community and personal service workers	32.9	18.8	29.7	18.6	100.0
Clerical and administrative workers	20.6	38.7	13.7	27.0	100.0
Sales workers	31.8	19.1	34.7	14.3	100.0
Machinery operators and drivers	25.0	26.7	24.8	23.5	100.0
Labourers	31.1	16.3	29.5	23.1	100.0
Total	27.7	23.8	26.1	22.3	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.14a: Proportion of employees within worker type by permanent/fixed-term, sex and occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male Permanent/fixed-term					
Managers	6.2	17.0	8.4	17.3	15.4
Professionals	6.9	16.8	7.0	25.1	19.4
Technicians and trades workers	52.5	30.3	25.6	22.0	27.5
Community and personal service workers	3.0	1.8	3.7	2.5	2.5
Clerical and administrative workers	3.4	6.7	7.7	8.1	7.2
Sales workers	5.8	8.0	13.0	6.3	7.3
Machinery operators and drivers	10.7	12.1	17.3	11.1	11.9
Labourers	11.4	7.3	17.4	7.6	8.8
Female Permanent/fixed-term					
Managers	7.0	12.5	3.4	10.3	9.4
Professionals	14.0	17.1	21.7	28.1	22.8
Technicians and trades workers	10.3	7.1	0.7	4.2	5.1
Community and personal service workers	19.1	7.7	23.6	6.8	11.0
Clerical and administrative workers	16.7	39.5	19.1	31.3	29.8
Sales workers	24.7	11.3	15.5	9.8	12.7
Machinery operators and drivers	1.1	3.0	1.4	2.1	2.1
Labourers	7.1	1.6	14.6	7.4	7.1

Source: HILDA survey, Wave 9 (2009).

Table A2.14b: Proportion of employees within worker type by casual, sex and occupation, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Male Casual					
Managers	0.9	1.4	3.2	1.7	1.8
Professionals	0.0	8.5	0.2	9.6	4.9
Technicians and trades workers	13.8	23.4	6.9	17.7	15.8
Community and personal service workers	16.2	14.4	18.8	13.5	15.6
Clerical and administrative workers	0.8	6.6	4.7	8.9	5.4
Sales workers	18.2	10.4	24.4	11.9	15.8
Machinery operators and drivers	12.3	11.3	10.1	10.3	11.0
Labourers	37.8	24.0	31.6	26.5	29.7
Female Casual					
Managers	0.3	2.6	1.7	3.2	1.8
Professionals	0.5	8.6	4.4	15.9	6.2
Technicians and trades workers	8.1	3.6	2.9	2.9	4.7
Community and personal service workers	25.2	14.6	22.1	17.5	20.6
Clerical and administrative workers	14.1	32.6	7.3	21.3	17.4
Sales workers	36.7	31.1	40.4	22.3	34.0
Machinery operators and drivers	1.0	2.2	2.9	1.5	1.9
Labourers	14.0	4.6	18.3	15.4	13.5

Source: HILDA survey, Wave 9 (2009).

Table A2.15: Proportion of employees within worker type by industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	2.9	3.0	0.1	0.7	1.5
Mining	0.2	1.2	0.3	4.0	2.2
Manufacturing	8.9	9.6	9.8	15.7	12.2
Electricity, gas, water and waste services	0.2	0.6	0.5	1.8	1.0
Construction	8.6	13.6	2.8	6.2	7.9
Wholesale trade	1.9	6.2	3.5	4.8	4.5
Retail trade	22.0	12.9	22.3	10.1	14.4
Accommodation and food services	17.9	5.6	18.0	6.0	9.5
Transport, postal and warehousing	3.7	4.8	3.5	5.3	4.7
Information media and telecommunications	0.2	1.7	0.6	5.1	2.9
Financial and insurance services	1.5	5.3	2.7	7.7	5.4
Rental, hiring and real estate services	2.4	3.1	0.4	1.3	1.8
Professional, scientific and technical services	2.6	9.8	1.1	10.9	7.9
Administrative and support services	2.7	3.8	2.8	2.5	2.9
Public administration and safety	0.6	0.7	0.4	0.8	0.7
Education and training	2.9	2.3	8.8	6.3	5.1
Health care and social assistance	11.8	8.5	18.1	6.6	9.6
Arts and recreation services	1.1	1.5	2.6	2.2	1.9
Other services	8.1	5.8	1.5	2.0	3.8
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.16: Proportion of employees across worker type by industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	27.9	50.2	1.3	20.6	100.0
Mining	1.3	14.0	2.1	82.6	100.0
Manufacturing	10.7	19.9	12.3	57.1	100.0
Electricity, gas, water and waste services	2.2	14.6	7.2	76.0	100.0
Construction	16.0	43.6	5.4	35.0	100.0
Wholesale trade	6.2	34.8	11.9	47.2	100.0
Retail trade	22.3	22.7	23.7	31.3	100.0
Accommodation and food services	27.6	14.9	29.0	28.4	100.0
Transport, postal and warehousing	11.5	25.9	11.4	51.1	100.0
Information media and telecommunications	1.0	14.9	3.4	80.7	100.0
Financial and insurance services	4.0	25.0	7.7	63.4	100.0
Rental, hiring and real estate services	19.7	44.0	3.6	32.8	100.0
Professional, scientific and technical services	4.9	31.4	2.2	61.6	100.0
Administrative and support services	13.7	33.2	14.9	38.2	100.0
Public administration and safety	12.6	24.8	9.9	52.7	100.0
Education and training	8.3	11.3	26.0	54.4	100.0
Health care and social assistance	18.0	22.3	28.8	30.9	100.0
Arts and recreation services	8.2	20.1	20.6	51.1	100.0
Other services	31.4	39.1	6.1	23.5	100.0
Total	14.5	25.6	15.1	44.8	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.17a: Proportion of employees within worker type by male and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	4.6	4.2	0.0	0.8	2.1
Mining	0.2	1.8	0.6	5.7	3.3
Manufacturing	13.1	11.8	14.1	19.5	16.0
Electricity, gas, water and waste services	0.3	0.9	1.0	2.6	1.7
Construction	17.3	20.8	5.2	8.8	12.7
Wholesale trade	2.0	7.3	6.0	4.9	5.3
Retail trade	17.2	9.8	20.1	8.8	11.4
Accommodation and food services	13.9	5.1	18.8	4.8	7.7
Transport, postal and warehousing	6.6	5.8	6.3	7.5	6.8
Information media and telecommunications	0.2	1.6	0.0	5.0	2.9
Financial and insurance services	0.6	2.7	3.9	7.2	4.7
Rental, hiring and real estate services	1.2	2.6	0.6	1.0	1.4
Professional, scientific and technical services	1.3	9.0	1.7	10.7	8.0
Administrative and support services	3.1	3.3	2.5	1.3	2.2
Public administration and safety	0.8	0.7	1.0	1.0	0.9
Education and training	0.6	1.6	3.0	3.5	2.6
Health care and social assistance	7.7	1.9	9.5	2.4	3.8
Arts and recreation services	1.6	2.2	3.7	2.2	2.3
Other services	7.6	6.9	1.9	2.4	4.2
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.17b: Proportion of employees within worker type by female and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	1.3	1.3	0.2	0.5	0.8
Mining	0.2	0.4	0.0	1.4	0.7
Manufacturing	5.1	6.4	6.7	9.8	7.6
Electricity, gas, water and waste services	0.0	0.1	0.1	0.6	0.3
Construction	0.7	3.4	1.0	2.3	2.0
Wholesale trade	1.9	4.7	1.6	4.7	3.6
Retail trade	26.4	17.4	24.1	12.1	18.1
Accommodation and food services	21.5	6.3	17.4	7.9	11.7
Transport, postal and warehousing	1.0	3.3	1.4	2.1	2.0
Information media and telecommunications	0.2	1.8	1.1	5.4	2.8
Financial and insurance services	2.2	9.1	1.8	8.4	6.2
Rental, hiring and real estate services	3.4	3.7	0.3	1.7	2.2
Professional, scientific and technical services	3.9	10.9	0.7	11.3	7.8
Administrative and support services	2.4	4.5	3.0	4.2	3.7
Public administration and safety	0.4	0.6	0.0	0.6	0.4
Education and training	5.0	3.2	13.1	10.5	8.3
Health care and social assistance	15.4	17.9	24.5	13.1	16.8
Arts and recreation services	0.6	0.6	1.8	2.2	1.5
Other services	8.5	4.3	1.2	1.3	3.2
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.18a: Proportion of employees across worker type by male and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	27.5	53.5	0.2	18.9	100.0
Mining	0.9	14.1	2.3	82.7	100.0
Manufacturing	10.3	19.9	10.4	59.4	100.0
Electricity, gas, water and waste services	2.5	15.1	7.3	75.1	100.0
Construction	17.2	44.2	4.8	33.8	100.0
Wholesale trade	4.7	37.0	13.5	44.8	100.0
Retail trade	18.9	23.0	20.7	37.4	100.0
Accommodation and food services	22.7	17.9	28.9	30.5	100.0
Transport, postal and warehousing	12.3	23.0	11.1	53.7	100.0
Information media and telecommunications	1.0	15.1	0.0	83.9	100.0
Financial and insurance services	1.7	15.1	9.6	73.6	100.0
Rental, hiring and real estate services	11.1	49.3	4.9	34.6	100.0
Professional, scientific and technical services	2.0	30.3	2.5	65.2	100.0
Administrative and support services	17.5	40.0	13.4	29.1	100.0
Public administration and safety	10.9	21.6	14.0	53.5	100.0
Education and training	3.1	17.3	13.8	65.7	100.0
Health care and social assistance	25.8	13.3	29.9	31.0	100.0
Arts and recreation services	8.9	25.5	19.2	46.5	100.0
Other services	22.7	43.8	5.2	28.3	100.0
Total	12.5	27.1	11.6	48.8	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.18b: Proportion of employees across worker type by female and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	29.4	38.8	5.4	26.5	100.0
Mining	4.2	13.3	0.8	81.7	100.0
Manufacturing	11.5	19.9	17.3	51.3	100.0
Electricity, gas, water and waste services	0.0	10.5	6.5	83.1	100.0
Construction	6.2	39.5	9.6	44.7	100.0
Wholesale trade	9.1	30.7	8.8	51.5	100.0
Retail trade	25.0	22.4	26.0	26.6	100.0
Accommodation and food services	31.7	12.5	29.1	26.7	100.0
Transport, postal and warehousing	8.4	38.1	13.0	40.4	100.0
Information media and telecommunications	1.0	14.6	7.7	76.7	100.0
Financial and insurance services	6.1	34.4	5.8	53.7	100.0
Rental, hiring and real estate services	26.5	39.7	2.5	31.3	100.0
Professional, scientific and technical services	8.5	32.7	1.8	57.1	100.0
Administrative and support services	10.9	28.2	16.0	44.9	100.0
Public administration and safety	16.7	32.5	0.0	50.8	100.0
Education and training	10.3	8.9	30.7	50.1	100.0
Health care and social assistance	15.8	24.9	28.4	30.9	100.0
Arts and recreation services	7.0	9.8	23.3	59.9	100.0
Other services	45.4	31.4	7.5	15.7	100.0
Total	17.1	23.8	19.4	39.7	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.19a: Proportion of employees within worker type by industry and full-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	4.9	2.7	0.0	0.8	1.6
Mining	0.4	1.4	0.6	4.9	3.1
Manufacturing	14.7	11.2	18.0	17.9	15.9
Electricity, gas, water and waste services	0.3	0.8	0.9	2.2	1.5
Construction	17.2	16.5	4.9	7.5	10.5
Wholesale trade	1.8	7.7	6.3	5.4	5.7
Retail trade	15.0	11.7	8.4	7.1	9.2
Accommodation and food services	4.9	3.6	8.6	3.7	4.3
Transport, postal and warehousing	5.3	5.6	5.6	5.6	5.6
Information media and telecommunications	0.2	1.9	0.3	5.6	3.5
Financial and insurance services	1.3	4.7	5.1	8.7	6.6
Rental, hiring and real estate services	2.5	3.2	0.6	1.5	1.9
Professional, scientific and technical services	3.2	9.6	2.0	12.3	9.6
Administrative and support services	2.1	3.3	4.0	1.9	2.5
Public administration and safety	0.7	0.7	0.8	0.6	0.7
Education and training	2.0	1.4	11.7	5.4	4.7
Health care and social assistance	11.2	5.7	18.5	5.0	7.2
Arts and recreation services	0.8	1.2	0.6	1.7	1.4
Other services	11.3	7.0	2.8	2.3	4.5
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.19b: Proportion of employees within worker type by industry and part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	1.2	3.7	0.0	0.4	1.3
Mining	0.0	0.7	0.0	0.3	0.3
Manufacturing	4.2	6.0	2.4	6.0	4.7
Electricity, gas, water and waste services	0.0	0.2	0.1	0.0	0.1
Construction	1.5	6.7	0.9	0.9	2.4
Wholesale trade	2.0	2.9	1.0	2.3	2.0
Retail trade	27.9	15.9	34.8	22.8	25.4
Accommodation and food services	28.2	10.3	26.9	15.4	20.2
Transport, postal and warehousing	2.4	2.9	1.6	4.2	2.8
Information media and telecommunications	0.2	1.1	1.0	3.3	1.4
Financial and insurance services	1.6	6.8	0.5	3.3	3.0
Rental, hiring and real estate services	2.3	2.8	0.2	0.6	1.4
Professional, scientific and technical services	2.2	10.3	0.3	5.2	4.4
Administrative and support services	3.2	4.9	1.8	4.9	3.7
Public administration and safety	0.5	0.7	0.1	1.6	0.7
Education and training	3.7	4.3	6.2	10.1	6.2
Health care and social assistance	12.3	14.9	17.3	13.4	14.4
Arts and recreation services	1.3	2.4	4.4	4.3	3.1
Other services	5.5	2.8	0.3	0.9	2.4
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.20a: Proportion of employees across worker type by industry and full-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	29.8	44.5	0.2	25.6	100.0
Mining	1.4	12.1	2.0	84.5	100.0
Manufacturing	9.1	18.5	12.2	60.3	100.0
Electricity, gas, water and waste services	2.2	13.7	6.3	77.8	100.0
Construction	16.0	41.2	5.0	37.8	100.0
Wholesale trade	3.0	35.1	11.8	50.1	100.0
Retail trade	15.9	33.2	9.8	41.1	100.0
Accommodation and food services	11.1	21.9	21.4	45.6	100.0
Transport, postal and warehousing	9.3	26.3	10.8	53.7	100.0
Information media and telecommunications	0.7	14.4	0.9	84.1	100.0
Financial and insurance services	1.9	18.9	8.4	70.8	100.0
Rental, hiring and real estate services	12.8	43.3	3.5	40.4	100.0
Professional, scientific and technical services	3.3	26.3	2.3	68.2	100.0
Administrative and support services	8.4	34.6	17.0	40.0	100.0
Public administration and safety	10.3	26.0	13.4	50.3	100.0
Education and training	4.2	8.1	26.7	61.0	100.0
Health care and social assistance	15.1	20.7	27.3	36.8	100.0
Arts and recreation services	6.0	22.6	5.0	66.4	100.0
Other services	24.7	41.5	6.8	26.9	100.0
Total	9.7	26.5	10.5	53.3	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.20b: Proportion of employees across worker type by industry and part-time status, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	24.1	67.4	0.0	8.5	100.0
Mining	0.0	63.0	3.1	33.9	100.0
Manufacturing	22.5	30.2	13.0	34.3	100.0
Electricity, gas, water and waste services	0.0	54.1	45.9	0.0	100.0
Construction	15.8	65.2	8.9	10.1	100.0
Wholesale trade	24.2	33.3	12.6	30.0	100.0
Retail trade	27.4	14.7	33.9	24.0	100.0
Accommodation and food services	34.8	12.0	32.9	20.4	100.0
Transport, postal and warehousing	21.0	24.5	14.2	40.4	100.0
Information media and telecommunications	2.6	17.7	16.7	63.0	100.0
Financial and Insurance services	13.4	53.1	4.3	29.1	100.0
Rental, hiring and real estate services	39.2	45.9	3.8	11.0	100.0
Professional, scientific and technical services	12.2	54.5	1.9	31.5	100.0
Administrative and support services	21.3	31.2	11.9	35.6	100.0
Public administration and safety	16.9	22.4	3.4	57.3	100.0
Education and training	14.8	16.4	25.0	43.8	100.0
Health care and social assistance	21.3	24.4	29.7	24.7	100.0
Arts and recreation services	10.3	17.7	35.2	36.8	100.0
Other services	58.7	27.8	3.3	10.2	100.0
Total	24.9	23.7	24.8	26.7	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.21a: Proportion of employees within worker type by male, full-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	5.9	3.6	0.0	0.9	2.0
Mining	0.4	1.9	1.0	6.3	4.0
Manufacturing	18.2	12.3	21.4	20.5	18.1
Electricity, gas, water and waste services	0.5	1.1	1.4	2.8	2.0
Construction	25.5	22.1	8.2	9.5	14.4
Wholesale trade	2.1	8.2	8.6	5.4	6.1
Retail trade	12.9	9.6	8.8	7.0	8.5
Accommodation and food services	2.2	3.8	8.4	3.1	3.7
Transport, postal and warehousing	7.1	6.2	8.5	7.3	7.1
Information media and telecommunications	0.4	1.9	0.0	5.1	3.3
Financial and insurance services	0.7	3.0	6.1	7.8	5.6
Rental, hiring and real estate services	2.0	2.7	0.5	1.1	1.6
Professional, scientific and technical services	2.0	9.0	2.5	11.2	8.9
Administrative and support services	1.6	2.6	3.5	1.4	1.9
Public administration and safety	1.0	0.5	1.4	0.9	0.8
Education and training	0.4	1.0	4.0	3.0	2.3
Health care and social assistance	6.3	1.6	11.7	2.3	3.4
Arts and recreation services	1.3	1.5	1.1	1.9	1.7
Other services	9.6	7.6	2.7	2.5	4.6
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.21b: Proportion of employees within worker type by female, full-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	2.8	0.7	0.0	0.5	0.7
Mining	0.6	0.2	0.0	1.9	1.1
Manufacturing	7.6	8.5	13.5	12.6	11.3
Electricity, gas, water and waste services	0.0	0.0	0.3	0.9	0.5
Construction	0.4	3.6	0.6	3.3	2.7
Wholesale trade	1.1	6.3	3.2	5.4	4.9
Retail trade	19.1	16.5	7.9	7.3	10.7
Accommodation and food services	10.5	3.2	8.9	5.0	5.7
Transport, postal and warehousing	1.5	4.2	1.8	2.1	2.5
Information media and telecommunications	0.0	1.9	0.7	6.6	4.0
Financial and insurance services	2.5	8.9	3.8	10.5	8.4
Rental, hiring and real estate services	3.7	4.3	0.8	2.2	2.7
Professional, scientific and technical services	5.7	11.2	1.4	14.6	11.1
Administrative and support services	3.3	5.0	4.7	2.9	3.7
Public administration and safety	0.0	1.1	0.0	0.1	0.3
Education and training	5.4	2.6	21.9	10.4	9.6
Health care and social assistance	21.2	15.4	27.6	10.6	15.2
Arts and recreation services	0.0	0.5	0.0	1.4	0.8
Other services	14.7	5.8	3.0	1.7	4.1
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.21c: Proportion of employees within worker type by male, part-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	2.4	7.5	0.0	0.0	2.4
Mining	0.0	0.9	0.0	0.0	0.2
Manufacturing	4.4	9.4	1.5	10.4	6.5
Electricity, gas, water and waste services	0.0	0.0	0.4	0.0	0.1
Construction	3.0	14.1	0.0	2.2	4.8
Wholesale trade	1.4	2.4	1.7	0.1	1.4
Retail trade	24.7	10.8	39.5	25.3	25.0
Accommodation and food services	34.1	12.1	36.8	21.5	26.1
Transport, postal and warehousing	5.7	3.9	2.6	9.1	5.4
Information media and telecommunications	0.0	0.0	0.0	3.7	1.0
Financial and insurance services	0.6	1.2	0.0	1.0	0.7
Rental, hiring and real estate services	0.0	2.1	0.7	0.0	0.7
Professional, scientific and technical services	0.0	9.3	0.4	5.9	3.9
Administrative and support services	5.7	6.8	0.8	0.7	3.5
Public administration and safety	0.3	1.9	0.3	1.9	1.1
Education and training	1.1	5.2	1.4	8.1	4.0
Health care and social assistance	10.4	3.4	5.2	3.3	5.6
Arts and recreation services	2.2	5.6	8.2	5.1	5.2
Other services	4.1	3.3	0.4	1.6	2.4
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.21d: Proportion of employees within worker type by female, part-time status and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	0.7	1.9	0.0	0.6	0.8
Mining	0.0	0.6	0.0	0.5	0.3
Manufacturing	4.1	4.3	2.9	4.1	3.8
Electricity, gas, water and waste services	0.0	0.2	0.0	0.0	0.1
Construction	0.8	3.2	1.2	0.3	1.4
Wholesale trade	2.2	3.1	0.8	3.2	2.3
Retail trade	29.3	18.3	32.8	21.7	25.6
Accommodation and food services	25.4	9.4	22.5	12.8	17.6
Transport, postal and warehousing	0.8	2.4	1.2	2.1	1.6
Information media and telecommunications	0.2	1.6	1.4	3.2	1.6
Financial and insurance services	2.1	9.4	0.8	4.2	4.0
Rental, hiring and real estate services	3.3	3.1	0.0	0.8	1.8
Professional, scientific and technical services	3.2	10.7	0.3	4.9	4.7
Administrative and support services	2.0	4.0	2.2	6.8	3.8
Public administration and safety	0.6	0.1	0.0	1.4	0.6
Education and training	4.8	3.8	8.3	10.9	7.1
Health care and social assistance	13.2	20.4	22.6	17.7	18.5
Arts and recreation services	0.8	0.8	2.8	4.0	2.2
Other services	6.2	2.5	0.3	0.6	2.3
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.22a: Proportion of employees within worker type by industry and permanent/fixed-term, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	2.6	3.1	0.0	0.7	1.4
Mining	0.4	1.3	0.3	4.3	2.7
Manufacturing	12.3	9.8	13.4	17.0	14.2
Electricity, gas, water and waste services	0.1	0.8	0.4	1.9	1.2
Construction	12.6	14.0	3.6	6.1	8.5
Wholesale trade	1.8	7.1	3.7	5.4	5.3
Retail trade	18.4	11.8	17.3	9.0	11.7
Accommodation and food services	6.6	2.0	7.9	3.9	4.2
Transport, postal and warehousing	3.9	5.7	4.0	5.0	5.0
Information media and telecommunications	0.2	1.8	0.6	5.0	3.2
Financial and insurance services	2.3	6.0	4.6	8.5	6.7
Rental, hiring and real estate services	2.7	2.7	0.5	1.4	1.8
Professional, scientific and technical services	3.3	10.8	1.7	12.0	9.6
Administrative and support services	2.2	3.9	3.3	2.3	2.8
Public administration and safety	0.6	0.5	0.2	0.6	0.5
Education and training	3.2	2.3	13.7	6.2	5.7
Health care and social assistance	15.5	8.7	22.9	6.8	10.1
Arts and recreation services	0.8	0.9	0.2	1.9	1.3
Other services	10.8	6.6	1.6	2.1	4.1
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.22b: Proportion of employees within worker type by industry and casual, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	3.3	2.7	0.3	1.0	1.8
Mining	0.0	0.5	0.2	1.1	0.4
Manufacturing	5.0	9.3	4.8	6.4	6.3
Electricity, gas, water and waste services	0.3	0.0	0.7	1.0	0.5
Construction	3.8	12.1	1.7	7.3	6.0
Wholesale trade	2.1	3.2	3.2	0.2	2.2
Retail trade	26.3	16.7	29.5	18.1	23.0
Accommodation and food services	31.1	18.0	32.3	21.1	26.1
Transport, postal and warehousing	3.4	1.7	2.8	7.8	3.8
Information media and telecommunications	0.2	1.2	0.6	6.1	1.9
Financial and insurance services	0.5	2.5	0.0	1.9	1.2
Rental, hiring and real estate services	2.0	4.3	0.3	0.3	1.7
Professional, scientific and technical services	1.9	6.2	0.3	3.1	2.8
Administrative and support services	3.3	3.4	2.1	4.0	3.1
Public administration and safety	0.6	1.3	0.9	2.4	1.2
Education and training	2.6	2.2	1.9	7.1	3.3
Health care and social assistance	7.5	7.9	11.2	5.5	8.1
Arts and recreation services	1.4	3.7	6.0	4.8	3.9
Other services	4.7	3.2	1.4	1.0	2.7
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.23a : Proportion of employees across worker type by permanent/fixed-term and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	19.0	56.8	0.0	24.3	100.0
Mining	1.4	12.7	1.5	84.3	100.0
Manufacturing	9.0	17.8	11.2	62.0	100.0
Electricity, gas, water and waste services	0.6	16.4	3.6	79.4	100.0
Construction	15.4	42.6	5.0	37.0	100.0
Wholesale trade	3.5	34.9	8.3	53.2	100.0
Retail trade	16.4	26.1	17.5	40.0	100.0
Accommodation and food services	16.5	12.6	22.3	48.7	100.0
Transport, postal and warehousing	8.3	29.7	9.5	52.4	100.0
Information media and telecommunications	0.7	14.8	2.3	82.2	100.0
Financial and insurance services	3.5	23.2	8.1	65.2	100.0
Rental, hiring and real estate services	15.7	39.3	3.3	41.7	100.0
Professional, scientific and technical services	3.5	29.2	2.2	65.1	100.0
Administrative and support services	8.2	35.8	14.1	41.9	100.0
Public administration and safety	11.8	25.2	3.5	59.6	100.0
Education and training	5.8	10.4	28.1	55.7	100.0
Health care and social assistance	16.0	22.2	26.8	35.0	100.0
Arts and recreation services	6.5	18.1	2.0	73.5	100.0
Other services	27.2	41.5	4.5	26.7	100.0
Total	10.3	26.1	11.6	52.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.23b: Proportion of employees within worker type by casual and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	49.4	34.3	4.5	11.7	100.0
Mining	0.0	29.3	13.2	57.5	100.0
Manufacturing	22.4	34.7	20.2	22.6	100.0
Electricity, gas, water and waste services	15.4	0.0	36.2	48.4	100.0
Construction	18.0	47.6	7.3	27.2	100.0
Wholesale trade	26.2	33.5	37.8	2.5	100.0
Retail trade	31.8	17.0	33.5	17.6	100.0
Accommodation and food services	33.3	16.2	32.5	18.1	100.0
Transport, postal and warehousing	24.7	10.3	19.3	45.7	100.0
Information media and telecommunications	2.6	15.3	8.9	73.1	100.0
Financial and insurance services	12.9	50.3	0.0	36.7	100.0
Rental, hiring and real estate services	32.9	59.5	4.3	3.3	100.0
Professional, scientific and technical services	19.3	53.1	2.7	24.9	100.0
Administrative and support services	29.1	25.2	17.2	28.4	100.0
Public administration and safety	13.6	24.3	18.5	43.6	100.0
Education and training	21.9	15.8	14.9	47.4	100.0
Health care and social assistance	25.7	22.9	36.3	15.2	100.0
Arts and recreation services	10.0	22.2	40.2	27.5	100.0
Other services	49.3	28.4	13.8	8.4	100.0
Total	27.7	23.8	26.1	22.3	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.24a: Proportion of employees within worker type by male, permanent/fixed-term and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	4.4	4.0	0.0	0.9	2.0
Mining	0.4	1.9	0.7	6.2	4.0
Manufacturing	17.1	12.3	18.7	21.2	18.2
Electricity, gas, water and waste services	0.1	1.2	0.6	2.7	1.8
Construction	22.9	20.7	6.9	8.3	13.0
Wholesale trade	2.4	8.4	6.9	5.5	6.1
Retail trade	14.5	9.8	15.9	7.7	9.7
Accommodation and food services	3.2	2.2	11.5	3.1	3.6
Transport, postal and warehousing	6.8	6.8	7.4	6.7	6.8
Information media and telecommunications	0.4	2.0	0.0	4.8	3.2
Financial and insurance services	0.7	3.3	6.2	7.9	5.8
Rental, hiring and real estate services	1.1	2.2	0.5	1.1	1.3
Professional, scientific and technical services	2.1	9.9	2.5	11.7	9.4
Administrative and support services	1.9	2.8	2.4	1.2	1.8
Public administration and safety	1.1	0.4	0.3	0.8	0.7
Education and training	0.8	1.5	4.0	3.5	2.8
Health care and social assistance	10.1	1.6	12.0	2.4	3.8
Arts and recreation services	0.8	1.2	0.5	1.9	1.5
Other services	9.3	7.7	2.7	2.5	4.6
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.24b: Proportion of employees within worker type by female, permanent/fixed-term and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	0.4	1.8	0.0	0.3	0.6
Mining	0.4	0.3	0.1	1.5	0.9
Manufacturing	6.4	5.8	8.9	10.3	8.6
Electricity, gas, water and waste services	0.0	0.2	0.2	0.7	0.4
Construction	0.3	3.5	0.8	2.5	2.2
Wholesale trade	1.0	5.2	1.1	5.3	4.1
Retail trade	23.0	15.0	18.4	11.0	14.5
Accommodation and food services	10.7	1.8	4.9	5.2	4.9
Transport, postal and warehousing	0.5	4.0	1.2	2.3	2.3
Information media and telecommunications	0.0	1.5	1.1	5.4	3.2
Financial and insurance services	4.1	10.3	3.3	9.4	8.1
Rental, hiring and real estate services	4.6	3.6	0.5	2.0	2.4
Professional, scientific and technical services	4.7	12.3	1.1	12.6	9.8
Administrative and support services	2.6	5.6	4.1	4.0	4.2
Public administration and safety	0.0	0.6	0.0	0.3	0.3
Education and training	6.1	3.5	21.7	10.2	9.9
Health care and social assistance	22.0	19.9	32.1	13.7	19.0
Arts and recreation services	0.8	0.4	0.0	1.8	1.1
Other services	12.6	4.9	0.6	1.5	3.5
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.24c: Proportion of employees within worker type by male, casual and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	5.0	5.3	0.1	0.4	2.7
Mining	0.0	1.0	0.5	1.0	0.7
Manufacturing	6.9	10.1	6.4	6.3	7.5
Electricity, gas, water and waste services	0.7	0.0	1.7	1.9	1.0
Construction	8.0	20.6	2.3	12.7	11.3
Wholesale trade	1.2	2.8	4.7	0.1	2.1
Retail trade	21.7	10.0	26.9	17.4	18.6
Accommodation and food services	31.3	17.3	30.8	18.0	23.9
Transport, postal and warehousing	6.4	1.6	4.6	13.7	6.7
Information media and telecommunications	0.0	0.0	0.0	6.3	1.7
Financial and insurance services	0.6	0.0	0.0	1.8	0.6
Rental, hiring and real estate services	1.4	4.3	0.7	0.5	1.7
Professional, scientific and technical services	0.0	5.5	0.4	3.0	2.3
Administrative and support services	4.9	4.9	2.6	2.6	3.8
Public administration and safety	0.3	1.9	2.2	2.5	1.7
Education and training	0.4	2.1	1.3	2.8	1.7
Health care and social assistance	4.1	3.1	5.5	2.5	3.7
Arts and recreation services	2.9	6.0	9.0	4.8	5.6
Other services	4.3	3.5	0.4	1.8	2.6
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.24d: Proportion of employees within worker type by female, casual and industry, per cent

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	2.1	0.0	0.5	1.7	1.1
Mining	0.0	0.0	0.0	1.1	0.2
Manufacturing	3.9	8.4	3.8	6.4	5.3
Electricity, gas, water and waste services	0.0	0.0	0.0	0.0	0.0
Construction	1.1	3.3	1.3	0.6	1.5
Wholesale trade	2.7	3.5	2.3	0.4	2.3
Retail trade	29.3	23.6	31.2	19.0	26.7
Accommodation and food services	31.0	18.7	33.2	24.8	27.9
Transport, postal and warehousing	1.4	1.8	1.6	0.5	1.4
Information media and telecommunications	0.3	2.5	1.1	5.9	2.0
Financial and insurance services	0.5	5.1	0.0	2.1	1.6
Rental, hiring and real estate services	2.4	4.3	0.0	0.0	1.7
Professional, scientific and technical services	3.2	7.0	0.2	3.1	3.1
Administrative and support services	2.2	1.8	1.7	5.8	2.6
Public administration and safety	0.8	0.6	0.0	2.2	0.8
Education and training	4.0	2.4	2.2	12.3	4.7
Health care and social assistance	9.6	12.9	14.9	9.3	11.8
Arts and recreation services	0.4	1.2	4.0	4.8	2.5
Other services	5.0	2.9	2.1	0.0	2.8
Total	100.0	100.0	100.0	100.0	100.0

Source: HILDA survey, Wave 9 (2009).

Table A2.25: Average hourly wages by worker type and labour force characteristics, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
All	16.39	24.03	17.69	29.00	24.20
Adult	18.23	25.34	19.65	29.89	25.95
Junior	11.49	14.77	11.45	13.77	12.69
Male	16.70	25.26	16.97	31.96	26.50
Female	16.11	22.32	18.24	24.47	21.34
Full-time	17.99	24.34	19.69	30.59	26.57
Part-time	15.07	23.27	15.85	22.07	19.06
Permanent/fixed-term	18.81	25.99	20.29	30.49	26.92
Casual	13.53	16.76	13.96	17.51	15.27

Note: Data presented are in dollars.
Source: HILDA survey, Wave 9 (2009).

Table A2.26: Average adult hourly wage by worker type and occupation, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Managers	20.04	29.10	29.24	38.87	34.31
Professionals	28.51	34.53	28.00	35.93	34.61
Technicians and trades workers	18.18	23.77	16.87	29.85	24.96
Community and personal service workers	17.13	20.91	18.23	22.96	19.90
Clerical and administrative workers	19.29	22.75	19.88	24.18	22.93
Sales workers	16.33	21.27	17.56	20.66	19.30
Machinery operators and drivers	17.87	22.66	17.50	30.20	24.74
Labourers	15.63	19.42	16.59	20.47	18.44

Note: Data presented are in dollars.
Source: HILDA survey, Wave 9 (2009).

Table A2.27: Average adult hourly wages by worker type and industry, dollars

	Small award-reliant	Small non-award-reliant	Larger award-reliant	Larger non-award-reliant	Total
Agriculture, forestry and fishing	16.07	25.49	8.41	20.70	21.45
Mining	15.98	42.83	24.00	41.11	40.61
Manufacturing	20.41	22.41	20.79	28.88	25.87
Electricity, gas, water and waste services	18.70	32.84	22.62	29.73	29.41
Construction	17.79	25.00	19.51	32.92	27.01
Wholesale trade	17.94	26.56	16.59	27.85	25.56
Retail trade	16.41	20.25	17.67	23.46	20.13
Accommodation and food services	14.37	16.02	16.55	18.61	16.63
Transport, postal and warehousing	18.37	22.15	18.72	31.34	26.09
Information media and telecommunications	16.45	29.83	45.22	31.73	31.50
Financial and insurance services	29.46	39.27	29.19	37.45	36.92
Rental, hiring and real estate services	17.59	23.33	23.93	29.76	25.08
Professional, scientific and technical services	19.55	29.99	22.07	36.96	33.70
Administrative and support services	14.58	21.87	17.48	18.57	18.83
Public administration and safety	16.98	20.81	15.21	30.82	25.94
Education and training	22.69	24.51	26.59	28.09	26.98
Health care and social assistance	21.93	27.88	18.17	26.79	23.74
Arts and recreation services	15.53	21.31	17.50	22.91	21.06
Other services	18.24	20.14	16.88	27.09	21.34

Source: HILDA survey, Wave 9 (2009).