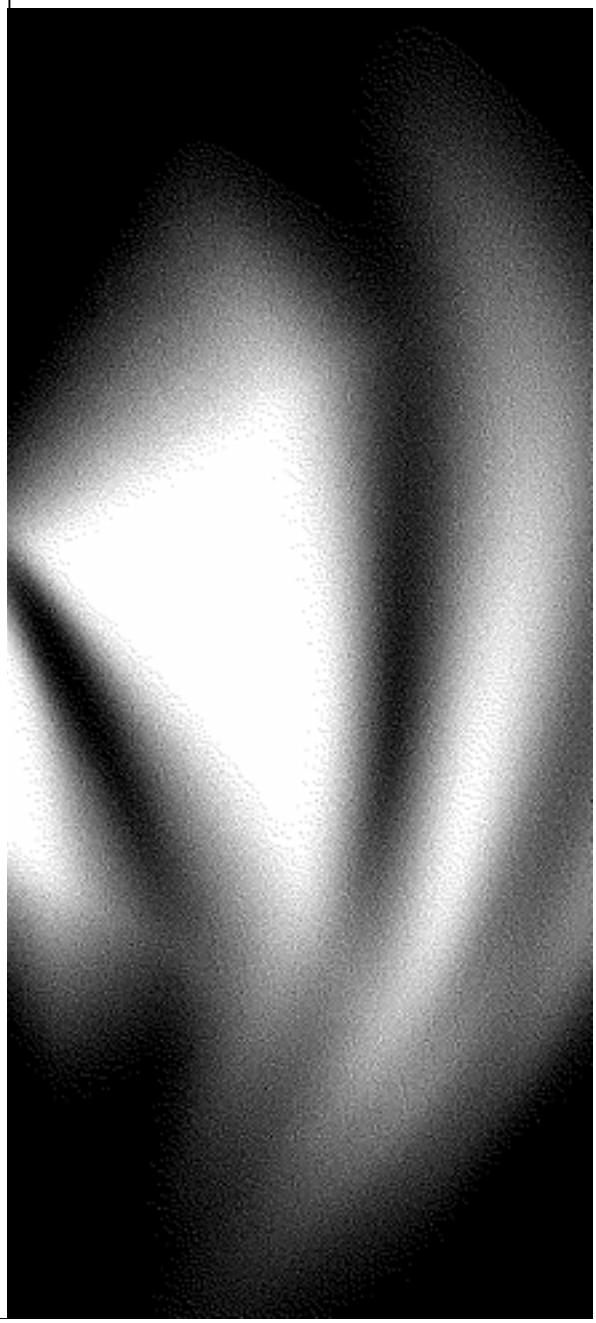
PRODUCTIVITY COMMISSION

# Work Arrangements on Large Capital City Building Projects

Labour Market Research



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# Foreword

Building and construction is a major industry. In 1997-98, it employed nearly 600 000 people (7 per cent of total Australian employment) and accounted for 6 per cent of GDP. The industry is also diverse, comprising residential, commercial and civil engineering sectors.

The Commission's early public consultations and assessment of existing research soon revealed that the greatest concerns about work arrangements in building and construction related to large capital city building projects. This study accordingly focuses on such projects, which account for up to 20 per cent of employment in the industry.

The study describes how work arrangements on large capital city building projects affect workplace performance, evaluates changes in work arrangements since the late 1980s, and assesses the impediments to further necessary change.

The study has drawn on information obtained through detailed discussions with industry parties (including representatives from several building sites). The Commission is grateful for the time given by participants, including those who read and responded to the issues brief and the work-in-progress report.

This is the final in a series of four reports requested by the Treasurer on work arrangements in key sectors of the economy. Previous studies examined the black coal, container stevedoring and meat processing industries.

Consistent with its objective of improving the information base on key issues affecting Australia's economic performance and living standards, the Commission welcomes further feedback on this report.

Gary Banks
Chairman
August 1999

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# Abbreviations

| | |
|---|---|
| ABS | Australian Bureau of Statistics |
| ACA | Australian Constructors Association |
| ACAC | Australian Conciliation and Arbitration Commission |
| ACCC | Australian Competition and Consumer Commission |
| ACCI | Australian Chamber of Commerce and Industry |
| ACIC | Australian Construction Industry Council |
| ACIRRT | Australian Centre for Industrial Relations Research and Training |
| ADAM | Agreements Database and Monitor |
| AIG | Australian Industry Group |
| AIRC | Australian Industrial Relations Commission |
| AMCA | Airconditioning and Mechanical Contractors' Association |
| ANTA | Australian National Training Authority |
| ANZSIC | Australian and New Zealand Standard Industry Classification |
| APCC | Australian Procurement and Construction Council |
| AQF | Australian Qualification Framework |
| ATO | Australian Taxation Office |
| AWA | Australian Workplace Agreement |
| AWIRS | Australian Workplace Industrial Relations Survey |
| AWU | Australian Workers' Union |
| BCA | Business Council of Australia |
| BERT | Building Employees' Redundancy Trust |
| BISCO | Building Industry Subcontractors Organisation |
| BITF | (NSW) Building Industry Task Force |
| BLF | Builders Labourers Federation |
| BWIU | Building Workers' Industrial Union |
| CA | Certified agreement |

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| CBD | Central Business District |
| C+BUSS | Construction and Building Unions Superannuation Scheme |
| CCF | Civil Contractors Federation |
| CEPU | Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union |
| CFMEU | Construction, Forestry, Mining and Energy Union |
| CIDA | Construction Industry Development Agency |
| CPI | Consumer Price Index |
| CTA | Construction Training Australia |
| CW | Construction worker classification |
| DEWRSB | (Federal) Department of Employment, Workplace Relations and Small Business |
| DISR | (Federal) Department of Industry, Science and Resources |
| DOFA | (Federal) Department of Finance and Administration |
| DPWS | (NSW) Department of Public Works and Services |
| DWRSB | (Federal) Department of Workplace Relations and Small Business |
| EBA | Enterprise Bargaining Agreement |
| ETU | Electrical Trades Union |
| FEDFA | Federated Engine Drivers' and Firemen's Association (Division of the CFMEU) |
| HIA | Housing Industry Association |
| IAC | Industries Assistance Commission |
| IC | Industry Commission |
| INDICOS | Industry Development Consultancy Services |
| MBA | Master Builders' Association |
| MOU | Memorandum of Understanding |
| MPA | Master Painters' Australia |
| MTIA | Metal Trades Industry Association |
| NatBACC | National Building and Construction Committee |
| NBCIA | National Building and Construction Industry Award 1990 |
| NCVER | National Centre for Vocational Education and Research |

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| NECA | National Electrical and Communications Association |
| NEDO | National Economic Development Office |
| OEA | Office of the Employment Advocate |
| OECD | Organisation for Economic Cooperation and Development |
| OHS | Occupational Health and Safety |
| PC | Productivity Commission |
| PCA | Property Council of Australia |
| PAYE | Pay as you earn |
| PPS | Prescribed payment system |
| QSOI | Queensland Statement of Intent |
| RDO | Rostered day off |
| TPA 1974 | (Federal) Trade Practices Act 1974 |
| TWU | Transport Workers' Union |
| VBIA | Victorian Building Industry Agreement |
| VBIDB | Victorian Building Industry Disputes Board |
| VET | Vocational Education and Training |
| VWA | Victorian Workcover Authority |
| WAD | Workplace Agreements Database |
| WCP | World Competitive Practices |
| WHS | Workplace Health and Safety |
| WRA 1996 | (Federal) Workplace Relations Act 1996 |

# Glossary

| | |
|---|---|
| **All-in payment** | A system of remuneration that is hourly, weekly or daily, which is either in lieu of payment for overtime, or is in lieu of award and agreement conditions such as annual leave. |
| **Award** | A legally enforceable determination containing terms and conditions of employment certified by an industrial tribunal at the federal or state level. |
| **Award simplification** | Removal of all except 20 allowable matters from all Federal awards by 30 June 1998 after which awards are meant to operate as safety nets. |
| **Casual employee** | An employee engaged on a daily basis without explicit commitment from the employer, or employee, on the period of engagement. |
| **Certified agreement** | An enterprise agreement negotiated that has been certified by the AIRC. |
| **Custom and practice** | Informal, typically unwritten, historically developed codes of conduct that are used to govern how work is performed. It supplements formal work arrangements. |
| **Daily hire** | Permanent contract of employment with notice period of termination of employment of one day as a minimum, but is otherwise ongoing in nature. |
| **Enterprise** | An organisation composed of one or more distinct branches or sections which has a single corporate identity and operates as a single business unit. |
| **Enterprise agreement** | An agreement at the enterprise level between the employer and employees (or their representatives) on terms and conditions of employment. |

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| **Enterprise allowance** | Payments made to employees under an enterprise agreement. Payments can be made on a weekly or hourly basis and sometimes attract penalty rates for overtime hours worked. |
| **Enterprise bargaining** | Negotiations between an employer and its employees (or their representatives) to formulate an agreement on pay and working conditions for a specific enterprise. |
| **Fixed price contract** | A form of contract that commits the supplier to provide a product for a fixed price by a specified date. |
| **Freedom of association** | Freedom of choice with respect to union membership by employees. |
| **Head contractor** | An enterprise that makes a contract with a client to complete a building project. Such enterprises traditionally sub-let construction work to subcontractors. |
| **Industry agreement** | An agreement that specifies work arrangements to be adopted across most enterprises in an industry. |
| **Labour hire company** | A company whose principal activity involves the supplying of personnel with whom it has an employment contract to a host or user firm. |
| **Labour productivity** | Output per unit of labour. Caution should be exercised in using this measure to compare performance between industries or between countries for the same industry because it does not control for differences in the use of non-labour inputs per worker. |
| **Liquidated damages** | Damages which are liquidated or agreed upon in advance between the parties should either of them breach the contract into which they have entered. |
| **No-ticket-no-start** | Compulsory union membership. |
| **On-costs** | Direct costs associated with the employment of labour excluding wages and other remuneration. |
| **One-in-all-in overtime** | The practice where all employees must be offered the opportunity to work overtime if anybody is asked to. |

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| **One-out-all-out** | The practice where employees not affected by inclement weather or a safety breach on a building site stop work because other employees are affected and so are unable to work. |
| **Parent award** | Award on which an enterprise agreement or an award is based. |
| **Pattern agreement** | A model enterprise agreement that is the outcome of bargaining at the sectoral or industry level. These can range from relatively prescriptive (for example, pro-forma agreements) to looser forms which allow for considerable diversity. |
| **Pattern bargaining** | Negotiations that lead to the adoption of common work arrangements in enterprise agreements across one or more sections of an industry. |
| **Project agreement** | An agreement (usually unregistered) that specifies work arrangements to be applied across a particular building project. |
| **Pyramid subcontracting** | The practice of a subcontractor, to whom a subcontract is originally awarded, reletting that contract or part thereof to another subcontractor. |
| **Rostered day off** | An arrangement where employees are entitled to a day off for accruing additional time (at ordinary time rates) on other work days. |
| **Site allowance** | A project specific payment made to employees under a project or industry agreement. Site allowances can increase with project size and proximity to the CBD. Payment is usually made on an hourly basis and does not attract penalty rates for overtime hours worked. |
| **Subcontractor** | A specialist supplier of construction services that traditionally makes its building contracts with a head contractor. |
| **Unit labour cost** | Labour cost per unit of output. |

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| **Weekly hire** | Permanent contract of employment with payment and work hours calculated on a weekly basis. Notice period of termination of employment is at least one week. Notice period increases as length of service increases. |
| **Work arrangements** | The way in which work is performed and managed, the conditions attached to that work, and the process by which wages and conditions are determined. |
| **Workplace** | The location or sites at which all or part of the production or process is carried out. |

## Key Findings

- This report focuses on changes in work arrangements on large capital city building projects since the late 1980s, and the scope for further performance-enhancing change. The diversity of the building and construction industry makes it inappropriate to extrapolate the findings of this study to other sectors of the industry.
- There has been some improvement in a number of the highly inefficient work arrangements that existed on large capital city building sites in the late 1980s. Nevertheless, not all changes have been positive, nor have improvements occurred consistently across all cities examined.
- Key features which influence work arrangements on large capital city building projects include: the finite duration of each project; the fixed price contracts imposed by clients on head contractors (which are then mirrored along the contractual chain linking the various enterprises on site); the cost and time pressures associated with contracts, which increase the vulnerability of sites to industrial action; and high unionisation rates.
- These features, combined with the critical role of labour in the production process, provide unions with substantial market power.
- Industry/trade and project agreements — where head contractors, employer associations and unions form the negotiating parties — largely determine work arrangements in this sector of the industry. Subcontractors, who can employ up to 90 per cent of labour on a project, have limited control over work arrangements, especially remuneration.
- In the late 1980s, union market power was used to entrench many inefficient work arrangements, including: one-out-all-out, demarcation of work tasks, inflexible inclement weather practices and inflexible rostered days off (RDOs). Such arrangements, and associated industrial disputes, led to projects being significantly delayed.
- The early 1990s recession was identified by most parties as a catalyst for improvements in work arrangements. The move to fixed price contracts, attitudinal changes by all parties and reduced inter-union rivalry due to union amalgamations, have also been major factors. In New South Wales, the exposure of unethical firm behaviour by the Gyles Royal Commission and the deregistration proceedings against the CFMEU gave added impetus to the extent of change.
- Most parties said completion times for large capital city building projects have fallen, particularly in Sydney. This is due to a range of factors, including better coordination on site and improvements in inclement weather practices and other work arrangements.

(Continued on next page)

Key findings (continued)

- There has been a fall in site-specific disputes following the introduction of fixed price contracts, but a commensurate increase in industry-wide disputes has seen the total rate of dispute related delays increase since 1995 to the high levels of the late 1980s.
- There has been a shift to enterprise agreements, but pattern agreements dominate at the subcontractor level. Thus, while there are variations in some work arrangements, remuneration rates appear uniform across all enterprise agreements within a particular trade.
- Employees on large capital city building sites have weekly incomes significantly above the building and construction average. Much of this is due to overtime. However, negotiated wage increases above the economy-wide average are also a factor. As well, payments are made for site or (ill-defined) productivity allowances.
- High rates of fatalities and injuries on large capital city building sites remain a concern, although there has been some reduction in the severity of injuries over the last few years.
- Work arrangements in Melbourne appear less flexible than those in Sydney or Brisbane. For example, the content of pattern agreements is more uniform in Victoria than in New South Wales, and the option of changing RDOs is used in both Sydney and Brisbane, but rarely in Melbourne.
- The complex nature of large capital city building projects, with head contractors having ultimate responsibility, means that it is appropriate to negotiate some work arrangements at different levels.
  - There are grounds for head contractors having control over some site-specific work arrangements, such as opening hours, site safety and inclement weather procedures and RDOs, to facilitate coordination.
  - The coordinating role of head contractors, however, should not extend to remuneration of subcontractor employees. Employers, in most cases subcontractors, are best placed to determine remuneration and associated incentives to improve the productivity of their own enterprises.
- The scope for further improvements in work arrangements will continue to be affected by the special economic characteristics of large capital city building projects (including the high cost of delays and the extensive use of subcontractors) which condition the relative bargaining strengths of the parties. However, planned changes to legislation to improve the timeliness of penalties against unprotected industrial action and to address de facto compulsory unionism would facilitate further change.

# Overview

## The context

Building and construction is a major industry in terms of both employment and its contribution to national output. During 1997-98, around 597 000 people (7.1 per cent of total employment) were employed in the industry, while output accounted for 5.7 per cent of GDP. The industry is diverse, and comprises the residential, non-residential and civil engineering sectors, with some overlap between these three. As well, the industry can be segmented by region and size of project.

Work on any one project is generally concentrated at a particular site, is of finite duration, and requires a broad range of skills which are usually provided by a combination of enterprises, many of which specialise by trade. From an industrial relations perspective, this means many enterprises and their workers need to coexist at the one workplace. In addition, appropriate sequencing of tasks is critical to successful completion of a building project. The level of complexity increases with project size, and is high on large capital city projects.

This study focuses on such large projects, because extensive consultations and an analysis of past research revealed that this is where concerns in relation to work arrangements and the perceived scope for payoffs from improved arrangements are greatest. Activities in Victoria in the mid to late 1980s and the New South Wales Gyles Royal Commission of the early 1990s confirmed this sector as one of high industrial unrest, with questionable relationships between the key parties. In this study, work arrangements are compared with those in the late 1980s, as this is widely considered to be a turning point in the industry's development.

It must be stressed, however, that the diversity of building and construction makes it inappropriate to extrapolate the findings about any one part of the industry to other sectors. Hence, the analysis of large capital city building projects should not be seen as being representative of other sectors of the building and construction industry. The Commission estimates that this sector accounts for, at most, 20 per cent of total employment in building and construction.

## Study objectives, methods and definitions

### Objectives

The objectives of this study are to:

- describe how current work arrangements affect workplace performance on large capital city building sites;
- identify and explain changes in work arrangements since the late 1980s; and
- assess any impediments to future workplace change which, if addressed, could raise performance.

### Study method

The research methods used in the study include consultations with interested parties; analysis of industry statistics and past research; examination of selected awards and agreements; consideration of written responses to a research issues brief sent to interested parties; and in-depth discussions with managers, employees and their representatives at selected large building sites. The regional dimension focuses on Sydney, Melbourne and Brisbane, because about 80 per cent of building and construction employment is in New South Wales, Victoria and Queensland, mostly in their capital cities.

### Definitions

Work arrangements are defined to include the way in which work is performed and managed, the conditions attached to that work, and the process by which wages and conditions are determined. The relationships with workplace performance are assessed using four indicators: labour productivity; unit labour cost; timeliness; and product quality. Each of these performance indicators is a 'partial' measure, in the sense that it relates to a particular aspect of workplace performance. Hence, this study uses all four measures to assess performance rather than a single indicator in isolation.

Data are not available to enable sector-specific estimates of labour productivity or unit labour costs. Interactions among work arrangements make it impossible to quantify how individual work arrangements affect the partial performance indicators or performance overall. As well, other factors such as design, project planning, building regulations, tendering practices and the behaviour of clients affect

workplace performance. For these reasons, the impacts of work arrangements can be assessed in terms of direction only.

## The framework

Key features which influence the development of work arrangements on large capital city building projects include:

- the finite duration of each project;
- the fixed price contracts agreed between clients and head contractors, which are then mirrored along the contractual chain linking the various enterprises on site;
- the cost and time pressures associated with these contracts; and
- the high unionisation rates.

This framework conditions the relative bargaining strengths of the third parties (employer associations, unions and governments) in this sector of the industry, and thus influences the work arrangements resulting from the negotiation processes.

### The contractual chain

The production process for large capital city buildings involves a complex sequence of interdependent tasks from the design through to the finishing stages, that require different types of specialist workers. Typically, the *client* (increasingly institutional investors) has very little to do with either the design or construction of the building. The design phase is usually undertaken by specialist consultants, while management of the construction work is awarded to a *head contractor*, who usually employs only a small workforce on site for project-wide duties. Most of the construction work is sub-let to specialist *subcontractors*, who may employ up to 90 per cent of workers on a site. Thus, there is no direct relationship between head contractors, who have ultimate responsibility for a project, and the majority of employees on site.

Selection of head contractors and subcontractors is often done on the basis of tender bids. Costs of market entry are low for many types of subcontracting and so the bidding process can be highly competitive at that level.

Fixed price building contracts have become the most common form of contract for large capital city building projects since the early 1990s. These contracts impose client-determined penalties to reflect the costs of delays (liquidated damages) and are used to transfer most of the risks associated with a project from the client to the

head contractor. A portion of this risk is passed down the contractual chain to each subcontractor, again through fixed price contracts. The contractual system thus provides a strong incentive for both head contractors and subcontractors to complete their work on time and within budget. Indeed, consultations with interested parties suggest that liquidated damages have rarely, if ever, been imposed.

## Vulnerability to industrial action

Under fixed price contracts, head contractors on large capital city building projects face large financial penalties for delays caused by site-specific industrial action. Because they operate on low profit margins, these penalties could amount to a large proportion of their profit. In contrast, increases in the cost of employing construction workers have little impact on head contractor profits, because subcontractors employ most workers. Hence, the pressure on head contractors to minimise site-specific industrial disputes can outweigh the incentive to contain the cost of employing construction workers. This is significant because head contractors control large building sites.

Costs of delay increase with the size of a project, so that vulnerability to industrial action is most evident on large projects where there is extensive subcontracting. Head contractors attempt to minimise disputes on such projects by requiring subcontractors to have a union endorsed enterprise agreement. Subcontractors are also usually required to make special payments to their employees, termed 'site allowances' in most states, which usually increase with project size and proximity to the central business district. These payments are seen, in part, as a means of buying industrial peace.

Subcontractors are usually informed of the costs of working on a particular site at the tendering stage. Where an unexpected increase in labour costs does occur during the life of a project, subcontractors have limited opportunity to pass it on because their work is governed by a fixed price building contract. However, in the longer term, these costs would be passed on to clients as higher building prices.

## The role of governments and collective organisations

### *Employer and industry associations*

There are many employer and industry associations in building and construction, reflecting the wide range of specialist skills used. As well, many subcontractors are small. Thus, a potentially efficient way for subcontractors to negotiate work

arrangements can be through employer associations. However, collective negotiations by subcontractors do not necessarily allow for these firms being competitors in the product market. Similarly, it is difficult for the many employer associations in building and construction to negotiate as a group because they are often competing for membership.

### *Unions*

Union coverage of employees is high (close to 100 per cent) on large building projects despite the abolition of compulsory unionism. This is because of the concentration of employees at a single location; unions are able to encourage and monitor membership through their involvement in site safety inductions and verification of payments to portable benefit schemes (a right under the *Workplace Relations Act 1996* (WRA1996) ); employees' belief that they would not otherwise be able to get work on large sites unless they join a union; the relatively high mobility of employees between employers (and locations), making their loyalty to unions generally greater than to any one employer; and the proactive role that unions have taken on safety issues, and in particular in enforcing safety standards on site.

There are positive and negative effects associated with building and construction unions. Building and construction unions can play a positive role as a collective voice for employees to prevent any victimisation, in facilitating communication on sites and in ensuring safety issues are addressed. They also have significant market power in negotiations over work arrangements because of their comprehensive coverage of employees and because large capital city building sites are inherently vulnerable to industrial action. As a result, work arrangements have been secured that do not produce the most effective and productive employment of labour.

### *Governments*

Governments have roles as clients, policy makers and regulators. In 1997-98, government clients accounted for just under a third of work in non-residential construction. Most notably, Federal, State and Territory Governments have used their role as clients by collectively agreeing on a National Code of Practice for the Construction Industry in 1997. For any party wishing to work on government projects, this involves adopting the principles of freedom of association and not coercing any other party to use specific types of work arrangements. New South Wales, Victoria, Western Australia, South Australia and the Northern Territory have their own codes of practice which are consistent with the National Code. The Federal Government has developed detailed implementation guidelines for the

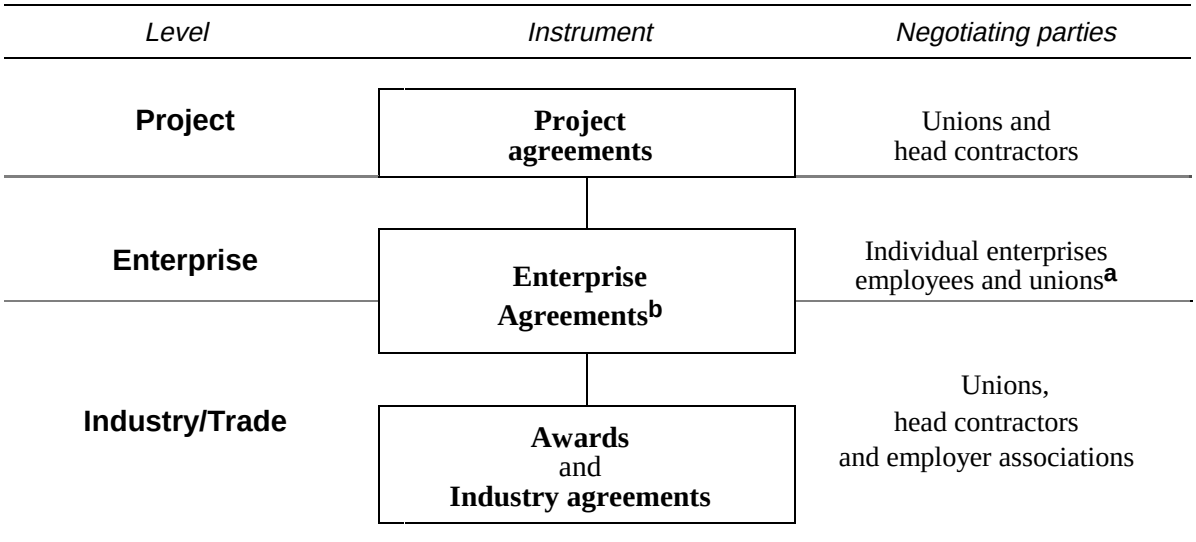
National Code which are applied to its projects. The private sector is encouraged to adopt the National Code on a voluntary basis.

The regulatory and public policy actions of governments cover a diverse range of areas. They include safety standards, licensing of tradespersons, and maintaining a system of rules governing awards and enterprise agreements. At the Federal level, there are also statutory agencies that promote the Government's workplace relations agenda. The Office of the Employment Advocate (OEA) has been enforcing provisions of the WRA 1996 that prevent coercion of subcontractors to employ only union members. The building and construction industry accounts for around 50 per cent of all complaints made to the OEA. As well, the Australian Competition and Consumer Commission (ACCC) has acted against alleged breaches of the *Trade Practices Act 1974* (TPA 1974) by union officials in building and construction.

## Negotiation processes

Negotiations on work arrangements for large capital city building projects occur at three interacting levels: industry/trade; enterprise; and project (figure 1). However, the dominance of project and industry/trade negotiations means that head contractors, the larger employer associations and unions negotiate most work arrangements, leaving a relatively limited role for employers and employees.

Figure 1 **Levels of negotiation for large capital city building projects**




[a] An employer and its employees control the negotiation process but they may use employer associations and unions to assist their negotiations. [b] Enterprise agreements can be the result of both enterprise and industry/trade level negotiations. The most typical form of enterprise agreements are pattern agreements. Enterprise level negotiations are more likely for non-wage issues.

Head contractors usually require their subcontractors to have an enterprise agreement that adopts work arrangements negotiated at an industry/trade level. This is generally made part of the tender documentation, and the agreement is often based on a 'pattern' agreement negotiated by an employer association and a union. While enterprise agreements negotiated substantially within an individual enterprise are relatively unusual, there is sometimes scope to negotiate non-wage issues solely at that level. However, remuneration levels and their rates of increase appear uniform for all enterprises within a particular trade. Project agreements negotiated between head contractors and unions typically contain provisions on site or productivity allowances, rostered days off (RDOs), work hours and health and safety requirements. Because project agreements cover many work arrangements that are specified in detail in awards and pattern agreements, they can constrain individual enterprise agreements.

### *Industry/trade agreements*

Where work arrangements are most effectively addressed at an industry/trade level**,** then the use of awards and industry agreements may be appropriate. This is most likely to be the case when specifying *minimum* standards, such as for safety procedures and minimum remuneration (including appropriate allowances). However, industry/trade level negotiations over *actual* rather than minimum conditions restrict the ability of firms to compete for employees or projects on the basis of different work arrangements. They may also reduce the capacity for firms to respond efficiently to changes in their competitive environment. Furthermore, where wage increases are negotiated at an industry/trade level without corresponding productivity improvements, unit labour costs will increase.

### *Enterprise agreements*

While not the norm, where enterprise agreements negotiated primarily between employers and their employees exist at the subcontractor level, these employees tend to have the same work arrangements across different building sites. Hence, employees of different subcontractors working on the same site would have different work arrangements. This would be most appropriate for issues such as ordinary hours, overtime, actual pay rates, performance assessments, bonuses and internal dispute resolution procedures. However, because the head contractor carries ultimate responsibility for the project, there needs to be sufficient *flexibility* in subcontractor enterprise agreements to enable head contractors to coordinate tasks on a building site efficiently.

*Project agreements*

Project agreements appear to be used on most large capital city building projects in Sydney and Brisbane. In Melbourne, the Victorian Building Industry Agreement (VBIA) assumes this role on most projects. Project agreements are often unregistered, reflecting the difficulty in registering federal multiple-employer agreements. Unregistered agreements between employers and employees are allowed under the WRA 1996 but may not replace or override any award or formal agreement, and operate in addition to formal awards or agreements already in place.

## Work arrangements in the late 1980s

The vulnerability of large capital city building sites to industrial action, combined with the high levels of demand in the latter half of the 1980s, led to a proliferation of inefficient work arrangements. Skill shortages were evident in the form of poorly trained employees and inexperienced site managers.

A major source of inefficiency in the late 1980s was time lost due to industrial disputes and inclement weather, with the problems being greater in Sydney and Melbourne than Brisbane. Disputes as to what constituted inclement weather arose — time off with full pay during inclement weather was considered an automatic entitlement by employees. Cost plus contracts, in place at that time, often enabled the cost of disputes to be passed on to clients. Projects were often delayed, one consequence being that employees remained employed for longer before having to find their next job. Some other examples of inefficient work arrangements included local area safety disputes which closed down the whole site (one-out-all-out); one-in-all-in overtime; and material handling crews using their strategic positions to extract large benefits from employers.

## The reasons for and nature of change

By the early 1990s, the need for reform was widely recognised. Building demand had collapsed with the recession, the industry's inefficiencies were widely publicised, and trust between clients and contractors was low.

While the structure of the industry does not appear to have changed fundamentally, a major factor leading to improvements in some work arrangements was the move to fixed price contracts and associated liquidated damages. These contracts became the norm in the early 1990s as clients, in a period of recession, sought to ensure greater certainty over completion time and cost. The New South Wales Gyles Royal

Commission of the early 1990s highlighted many of the then existing inefficient work arrangements, and recommended deregistration of the CFMEU, with serious consideration also to be given to deregistering the MBA. While neither eventuated, the recommendations contributed to what is generally perceived as a change in attitude by all parties, especially regarding industrial disputes.

The generally greater willingness by all parties to negotiate more flexible work arrangements appears to have persisted despite a return to more favourable market conditions since the mid 1990s. On balance, it appears that there has been some improvement in a number of the inefficient work arrangements that existed in the late 1980s (table 1). Nevertheless, not all changes have been positive, and improvements have not occurred across the board, either within or between the cities examined. In particular, work arrangements on large sites in Melbourne appear on average to be less flexible than those in Sydney and Brisbane. As well, industrial unrest appears to have risen again in the last few years, being greater in Victoria than the other states.

Most parties claimed that, compared with the late 1980s, large buildings are now being completed in significantly shorter periods, particularly in New South Wales. This was attributed to a number of factors, including changes in technology, such as off-site prefabrication, and improved site communication, dispute resolution and workplace health and safety practices. Overall, however, many parties felt that the shorter construction periods were mainly due to a large decline in time lost due to site-specific industrial disputes and inclement weather practices.

While many parties claimed that site-specific disputes have fallen, since 1995 the rate of dispute related delays has increased to the levels of the late 1980s. There appears to have been an increase in time lost due to industry-wide disputes which has offset and may be connected to the reduction in site-specific disputes. A major reason for this change was probably the greater use of fixed price building contracts (that penalise contractors for site-specific disputes). However, as part of minimising site-specific disputes, head contractors often require subcontractors to have a (union endorsed) pattern enterprise agreement and pay their employees a site allowance. Total time lost remains much higher in building and construction than the economy-wide average.

The fall in inclement weather delays can be attributed to a more reasonable interpretation of what constitutes inclement weather by employees, fewer instances of one-out-all-out and, on occasion, relocation of employees to dry work areas.

Table 1 **Some changes to work arrangements since the late 1980s**

| *Work arrangement* | *Late 1980s* | *Changes* |
|---|---|---|
| Negotiation processes and outcomes | • Work arrangements negotiated at an industry/trade level to achieve uniform remuneration on similar projects | — |
| | • Subcontractors required to follow site-wide pay and conditions | — |
| | • Unregistered and informal agreements often used to implement agreed outcomes | • Some work arrangements formalised in pattern agreements |
| Remuneration | • Site allowances that usually rise with project size and proximity to the CBD | • Only modest attempts to link site allowances to productivity |
| | • Restrictions on performance related payments (eg: piece work rates) | — |
| | • Access to part of redundancy payment on voluntary resignation | — |
| | • Prescriptive system of allowances | • Some cases where allowances have been incorporated into base pay |
| | • Few head contractor construction workers with salary arrangements | • Shift to salary arrangements for some head contractor employees |
| Management and communication | • Adversarial relationships | • Less adversarial relationships in many cases |
| | • Little formal management training | • Formal management training by some head contractors for their employees |
| | • Poor dispute resolution skills | • Greater emphasis on preventing and resolving disputes |
| Work hours | • Large amount of paid non-working time (late starts & extended breaks) | • Reduced paid non-working time (including staggered breaks) |
| | • Inflexible use of RDOs in Victoria and New South Wales | • Use of RDOs has become more flexible in New South Wales |
| | • One-in-all-in overtime | • One-in-all-in overtime not evident |

(Continued on next page)

Table 1 (continued)

| *Work arrangement* | *Late 1980s* | *Changes* |
|---|---|---|
| Workplace health and safety procedures | • Limited safety procedures | • Greater attention to safety |
| | • Unreasonable interpretation and management of inclement weather (including employees refusing to transfer to dry work areas when available) | • More reasonable interpretation and management of inclement weather on most sites |
| | • One-out-all-out during inclement weather and safety breaches | • Fewer cases of one-out-all-out |
| | • Contrived safety breaches to get paid time off | • Contrived safety breaches allegedly still occur but appear to be less prevalent |
| Hiring | • No-ticket-no-start | • No-ticket-no-start made illegal (but often still applies in practice) |
| | • Limits on the use of self-employed subcontractors and labour hire workers | — |
| | • Restriction on the period of continuous employment of casual employees | • Limited easing of restrictions on the use of casual plumbing employees |
| Demarcation | • Dispute related delays and under-employed workers due to demarcation between unions | • Union amalgamation and award restructuring has reduced demarcation and facilitated multiskilling |

There have been improvements in work arrangements associated with workplace health and safety. For example, many large capital city building sites now have formal committees, comprising managers and employees, who undertake weekly inspections to identify and remedy safety problems before they lead to injuries.

Changes in the composition of remuneration have had mixed effects on workplace performance. On the positive side, rolling-in of allowances has reduced the prescriptiveness of remuneration schemes and hence lowered administrative costs. There have also been modest attempts to link payments to performance targets. On the other hand, the widespread use of pattern bargaining for actual remuneration probably means that some enterprises are paying large wage increases for little or no improvement in productivity.

## Scope for further improvements

Table 1 provides some examples of changes in inefficient work arrangements from the late 1980s. Differences between states suggest some further changes could be readily achievable.

The potential to reduce disputes is illustrated by differences between New South Wales and Victoria. The rate of dispute related delays for building and construction in New South Wales has been below the national average for that industry in every year since 1994. In contrast, the corresponding rate of dispute related delays in Victoria has been at least twice as high, even though New South Wales has had high levels of demand associated with Olympics-related construction. This suggests that the additional impetus for reform in New South Wales provided by the Gyles Royal Commission has had a positive effect.

Another important example of the scope for reform relates to negotiation processes. The primary role taken by contractors, unions and employer and trade associations in determining work arrangements on large capital city building projects discourages innovative subcontractors from introducing more productive or efficient work arrangements in their enterprises, and so can act as a constraint on future productivity growth. Again, there are inter-state differences. The use of pattern agreements is widespread in Victoria whereas the unions in New South Wales have been less successful in determining the content of subcontractor enterprise agreements.

However, it needs to be recognised that the structure of a large capital city building site requires head contractors to have a degree of control. For example, if different RDOs or inclement weather procedures applied across a site, this would make it difficult to coordinate the many interdependent tasks of different subcontractors.

Subcontractors should not be required by head contractors to use a pattern enterprise agreement. By the same token, enterprise level negotiations should not undermine the productivity gains associated with the coordination role of head contractors. In practice, this means that enterprise agreements should not constrain the ability of head contractors to establish certain site-specific work arrangements *where they are needed for efficient operation*. These would include site safety and inclement weather procedures, and site opening hours and RDOs. It does not include matters that have relevance beyond a particular project, such as remuneration and hiring practices used by subcontractors.

Actual remuneration (including site or productivity allowances) is best determined by employers, which in most cases are subcontractors. Productivity incentives for a project would be negotiated between the head contractor and its subcontractors. The

distribution of any benefits to employees would then be determined through enterprise level negotiations between each subcontractor and its employees. This would enable subcontractors to be innovative in how they improve productivity at an enterprise level.

There is a range of other work arrangements that could be improved. For example, it is not apparent why there should be restrictions on the use of self-employed subcontractors, casuals and labour hire workers. They are legitimate alternative sources of labour, provided there is compliance with relevant taxation and safety legislation and they do not impede the coordination role of head contractors. Restrictions on the use of labour hire workers could limit the scope for contractors to introduce innovative work arrangements. One head contractor in Queensland indicated that it uses labour hire workers for its crane crew for the length of a project. Such an arrangement appears to be rare in the southern states.

There are also restrictions on the use of performance related payments, such as piece work rates and all-in payments, that appear hard to justify. Such alternative forms of remuneration may have a major positive effect on workplace performance.

There is also scope for greater flexibility in RDOs. It appears that large building sites always close on the official RDO in Melbourne. In contrast, the option of changing RDOs is being used in Sydney and Brisbane.

## Achieving further change

Unlike many other industries, international competition does not provide a major pressure for more efficient work arrangements. Building and construction is essentially a non-traded activity with no direct competition from imports, or even from different cities within Australia (which is why work arrangements can differ between states). Nevertheless, building and construction inputs (such as capital and labour) are to some extent mobile across state and national boundaries. This could provide indirect pressure to adopt more efficient work arrangements.

Competition within a particular city, especially at the subcontractor level, is often strong. However, the impact that this has on workplace change is constrained by the vulnerability of large capital city building projects to industrial action. This vulnerability derives from the high cost of delays; a contractual system that separates the control of building sites from the employment of workers (subcontracting); de facto compulsory union membership; and, to date, relatively ineffective legal remedies against unprotected industrial action.

Delays will continue to be costly for large capital city building projects and the extensive use of subcontracting is likely to remain, given the large gains from

specialisation. Thus, achieving further workplace change will in part depend on how the issues of de facto compulsory union membership and legal remedies against industrial action are addressed. Governments play an important role in this regard. Nevertheless, it needs to be recognised that a variety of parties with different, and sometimes competing, interests influence work arrangements on large capital city building projects.

## Role of the key parties

### *Head contractors*

Head contractors control large capital city building sites and so have a major role in determining work arrangements. They have an important role in coordinating the many interdependent tasks of different subcontractors across a building site. Their behaviour is influenced in large part by the sizeable financial penalties they can incur if a matter under their control causes delays on a major building project (this is now a common condition in building contracts). Since the late 1980s, they have attempted to reduce such delays through improved management, dispute resolution and safety procedures. However, their ability to alter work arrangements is constrained by the bargaining strengths of unions.

Currently head contractors typically require subcontractors to use a union endorsed enterprise agreement and to pay their employees a site or productivity allowance. There is limited scope for head contractors to reduce the vulnerability of large capital city building projects to industrial action. While in principle they have the option of reducing their use of subcontracting, this would mean forgoing the sizeable gains from specialisation in building and construction. Head contractors could also move to reduce the de facto no-ticket-no-start policy on their large building sites. However, there is little incentive for an individual head contractor to do this alone. It would bear a large cost in the short term (due to industrial action) and, assuming it remained financially viable, much of the resulting benefit would probably be captured by its competitors.

### *Subcontractors*

Subcontractors employ most workers on large capital city building sites and thus should have a major role in determining work arrangements. In particular, they are in the best position to assess the trade-offs involved in negotiating changes in remuneration. Therefore, all types of remuneration are best addressed in enterprise agreements, rather than in industry or project agreements.

For non-remuneration work arrangements, there needs to be sufficient flexibility in subcontractor enterprise agreements to enable head contractors to coordinate tasks effectively on a building site. This benefits both the head contractor and its subcontractors by, for example, ensuring that deadlines are met.

### *Employer associations*

Smaller subcontractors may choose to use employer associations to negotiate their enterprise agreements. However, they should have the option to use enterprise level negotiations if they wish. At present, subcontractors (irrespective of their size) are often compelled to follow the outcomes collectively negotiated by the relevant union and employer association, even if they are not a member of that association.

### *Unions*

As noted, building and construction unions have substantial negotiating power over work arrangements. This reflects the high rate of union membership on large capital city building sites and the vulnerability of such sites to industrial action. Nevertheless, there has been some change in attitudes since the late 1980s, with different impacts being discernible among the states.

Unions have generally been able to use their negotiating power with head contractors to achieve conditions such as requiring subcontractors to have a union endorsed enterprise agreement and to pay their employees a site allowance. The majority of the costs of these arrangements are generally borne by subcontractors in the short run and by clients in the long run. Head contractors have agreed to these conditions as a means of avoiding costly disputes.

Some parties consulted for this study also argued that many workers on large capital city building sites would prefer to be self-employed but are prevented from doing so by union opposition. Other parties argued that employees follow union directions because of concern that they could not otherwise get work on large building sites.

Differences in the impact of unions between states are illustrated by the generally greater flexibility in work arrangements and lower levels of industrial disputes in New South Wales than Victoria. These differences can in part be attributed to attitudinal changes in response to the initiation of CFMEU deregistration proceedings in New South Wales following the Gyles Royal Commission. Many parties consulted for this study claimed that the Victorian branches of the CFMEU and the CEPU are less flexible than their New South Wales counterparts.

*Governments*

Governments have a key role in facilitating change through their public policy and regulatory activities and as building clients.

Union market power in this industry has been addressed directly by enforcement of provisions of the WRA 1996 that prevent coercion of subcontractors into employing only union members. Such enforcement is the responsibility of the OEA. Similarly, the ACCC has acted against alleged breaches of the TPA 1974 by union officials in building and construction. These actions appear to be having an effect. For example, some Queensland subcontractors consulted for this study indicated that as a consequence they now had greater scope to use enterprise level negotiations.

Contracts used for large capital city building projects usually state that a project must be completed by a specific date or the contractor will be subject to large financial penalties. Because of the lack of timely penalties for unprotected industrial action, there has been a tendency by employers to accept union demands rather than take legal action that can be costly and slow to reach a final (uncertain) outcome.

The Federal Government proposes to address this issue through the *Workplace Relations Legislation Amendment (More Jobs, Better Pay) Bill 1999* introduced into Parliament on 30 June 1999. The Bill would oblige the Australian Industrial Relations Commission (to be renamed the Australian Workplace Relations Commission) to issue orders to stop or prevent unprotected industrial action within 48 hours of an application being made. The Bill would also prohibit conduct that breaches freedom of association under the guise of project agreements, and prohibit the current restrictions on the use of self-employed workers on large capital city building sites.

There is a limit to the capacity of governments to facilitate change through legislation. This is because of the economic forces which condition the behaviour of the relative bargaining positions of other parties. Recent examples of how this has manifested itself include:

- pattern bargaining in response to changed industrial relations legislation to encourage enterprise level negotiations;
- the use of unregistered project agreements, to avoid the strict certification process for multiple employer agreements in the federal jurisdiction; and
- making use of a union endorsed enterprise agreement a condition of tender for subcontractors, so that freedom of association laws are not breached.

Governments can also play a direct role as clients. They have developed codes of practice which give preference to contractors that, among other things, follow the

principle of voluntary unionism and do not coerce subcontractors into using specific types of work arrangements. However, the impact of these codes on large capital city building sites has been limited, because of the trend away from governments owning large capital city buildings.

### *Private sector clients*

Private sector clients do not take a direct role in determining work arrangements on large capital city building projects. Nevertheless, their actions can be influential. Most notably, the push by clients in the early 1990s to use fixed price building contracts was a major factor leading to the reduction in delays caused by inclement weather and site-specific disputes.

# 1 Introduction

This study examines the relationship between work arrangements and workplace performance on large capital city building sites. It is the fourth in a series of reports requested by the Treasurer on work arrangements in key sectors of the economy. Previous studies examined the black coal, container stevedoring and meat processing industries (see Productivity Commission 1998a, 1998b, 1998c for details).

The objectives of this study are to:

- describe how current work arrangements affect workplace performance on large capital city building sites;
- identify and explain changes in work arrangements since the late 1980s; and
- assess any impediments to future workplace change which, if addressed, could raise performance.

Emphasis is placed on the impact of past workplace change because it provides a useful reference point for assessing how current and possible future work arrangements affect performance. The period chosen for analysis begins in the late 1980s, as this is widely considered to be a turning point in the industry's development (see for example McGrath-Champ and Thompson 1997; DPWS 1996).

Work arrangements are defined in this study to include the way in which work is performed and managed, the conditions attached to that work, and the process by which wages and conditions are determined.

While work arrangements are the focus of this study, it is recognised that they are not the only determinant of workplace performance. Therefore, reference is made to the other important factors which can affect building and construction performance. These include design, project planning, building regulations, and tendering practices.

The remainder of this chapter provides an overview of the building and construction industry and then explains the rationale for focusing on large capital city building sites, the research methods used, and the structure of the analysis.

## 1.1 Overview of output and employment

Building and construction is a significant industry in terms of both employment and its contribution to national output. During 1997-98, it employed an average of 597 100 people (7.1 per cent of total Australian employment) and accounted for 5.7 per cent of Australian GDP (ABS 1998f, 1999).

### Output diversity

The composition of building and construction activity is diverse. For this reason, the Australian Bureau of Statistics (ABS) divides output into three sectors:

- residential building;
- non-residential building; and
- engineering construction.

Residential building is dominated by work on new houses, which accounted for 60 per cent of the value of all work done in the residential sector in 1997-98 (ABS 1998b). Other types of new dwellings (such as apartments) accounted for a further 24 per cent of residential work. The remaining 16 per cent was due to alterations and additions to existing buildings.

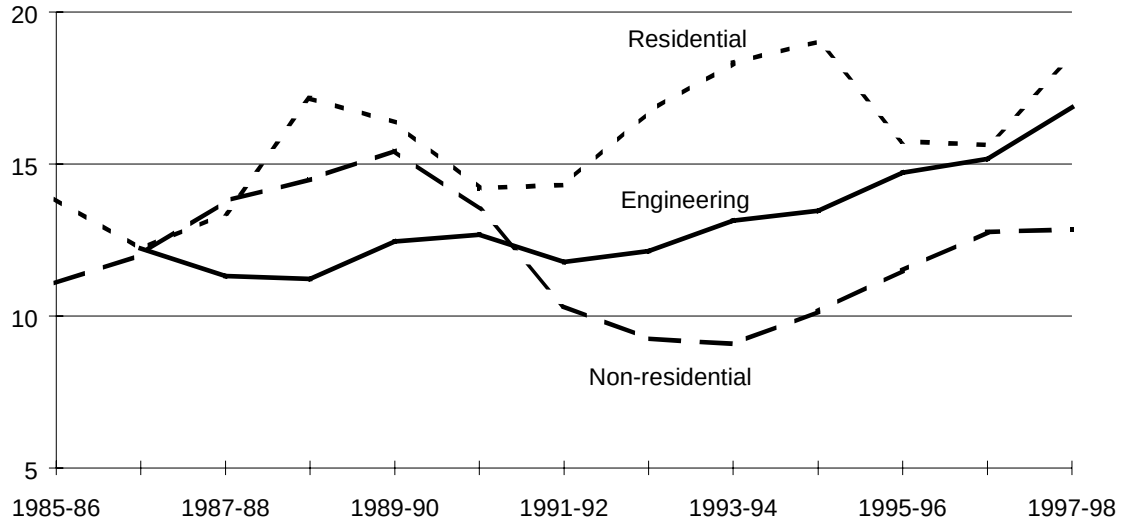
Activity in non-residential building is more diverse. In 1997-98, the five most important areas in terms of their share of the total value of non-residential building work done were shops (17 per cent); offices (16 per cent); other business premises (15 per cent); educational buildings (10 per cent); and entertainment and recreation facilities (10 per cent) (ABS 1998b).

The most important type of engineering construction is roads, highways and subdivisions, accounting for 31 per cent of the value of all engineering work done in 1997-98 (ABS 1998c). Other important areas in terms of their share of total engineering construction in 1997-98 were heavy industry (19 per cent) (includes oil and gas infrastructure, aluminium smelters and mineral processing facilities); telecommunications (16 per cent); electricity generation, transmission and distribution (9 per cent); and railways (7 per cent).

Over time, the relative size of the three sectors has varied because engineering construction has been less cyclical than residential and non-residential building. A notable example of the pronounced building cycle was the significant rise in the real value of non-residential building in the 1980s followed by a 40 per cent decline in that sector's output from 1989-90 to 1992-93 (figure 1.1). The dislocation caused by

this large fall in activity created pressures for work arrangement changes which are discussed in chapter 2.

Figure 1.1 **Real value of building and construction work done, by sector**
1996-97 $ billion, chain volume measure




*Data sources:* ABS (*Building Activity: Australia*, Cat. no. 8752.0; *Engineering Construction Activity: Australia*, Cat. no. 8762.0).

## Employment

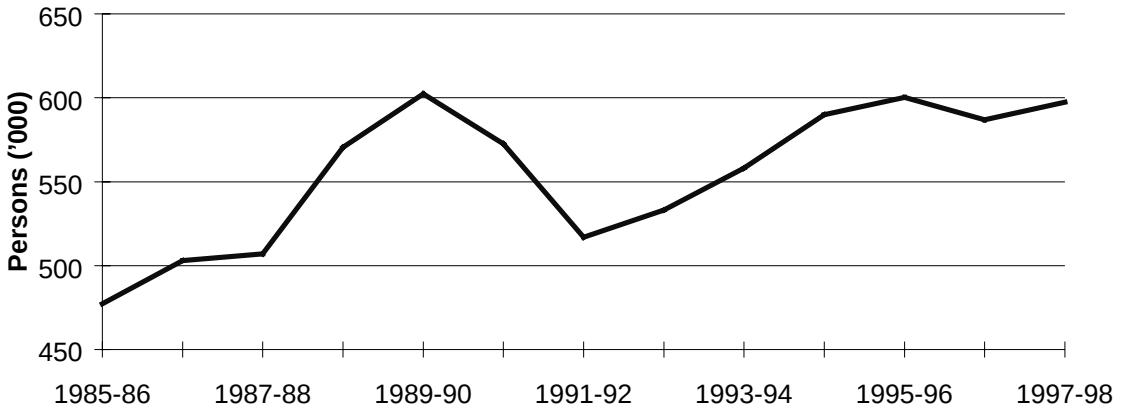
Movements in aggregate building and construction employment over time reflect the volatility of building activity. Average annual employment peaked in 1989-90 at 602 300 people and then fell by 14 per cent in the following two years (figure 1.2). By 1995-96, employment had returned to a level similar to that recorded in 1989-90.

The ABS does not collect information on the division of labour between the residential, non-residential and engineering sectors. Official statistics also make no distinction between those working on minor repairs, major refurbishments, or new projects. Instead, building and construction workers are simply classified as working in either construction trade services or general construction.

Construction trade services comprises units mainly engaged in the provision of specialist services, such as concreting or plumbing. In May 1998, construction trade services employed around two-thirds of building and construction workers (CTA 1998). The remaining one-third were employed in general construction, which comprises units engaged in building and construction more generally. While general construction employment can be divided into the three sectors of residential,

non-residential and engineering, this accounts for only a fraction of all labour used in those sectors.

Figure 1.2 **Building and construction employment**




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

Almost 80 per cent of building and construction employment is in the eastern mainland states. In 1997-98, New South Wales accounted for 34 per cent of Australian building and construction employment, while Victoria and Queensland accounted for a further 23 and 21 per cent respectively (ABS 1998f).

## 1.2 Focus of workplace level analysis

A key feature of work arrangements studies is the micro level analysis of individual workplaces. This is in contrast to macro level studies of industry statistics, which are often too broad to identify the relationship between work arrangements and workplace performance. The weaknesses of such industry level analyses are particularly evident for building and construction. As noted in section 1.1, ABS labour statistics are aggregated over three diverse sectors (residential, non-residential and engineering) and types of work (minor repairs, major refurbishments and new projects). This prevents estimation of labour productivity at the sectoral level.

While a workplace level analysis provides insights not available from more aggregated studies, it requires far greater resources for information collection and analysis. This was of particular concern for this study because the building and construction industry has diverse work arrangements varying by sector, region, trade and enterprise size. This makes it impractical to apply the micro level approach of a work arrangements study to the entire building and construction industry.

Extensive consultations with parties outside the Commission (see section 1.3 for details) and an analysis of past research revealed that the sector where concerns in relation to work arrangements were greatest was large commercial building projects in capital cities. These concerns appeared to be a function of project size (because of the huge financial risks involved as a site's scale increases) and the perceived scope for payoffs from improved work arrangements.

In comparison, there were fewer concerns in relation to work arrangements in residential building or the engineering sector. Furthermore, residential building had already been examined in a series of past reports for the Federal Government (see for example INDECOS 1994; Campling 1994; ACIL Economics 1996).

It was therefore decided to focus the workplace level analysis in this study on large capital city building projects. The regional dimension of this analysis was concentrated on Sydney, Melbourne and Brisbane because about 80 per cent of building and construction employment is in New South Wales, Victoria and Queensland. The Commission estimates that large capital city building projects account for no more than 20 per cent of employment in building and construction.

It must be stressed that the diversity of building and construction makes it inappropriate to extrapolate the findings about any part of the industry to other sectors. Hence, the analysis of large capital city building projects should not be seen as representative of the entire building and construction industry. Rather, it focuses on the area where the perceived scope for improved work arrangements is greatest. Nevertheless, reference is made in this study to the different practices of other sectors of building and construction where this provides a context for the analysis. This is based on past research, written submissions to the Commission and industry consultations. However, only limited conclusions can be made from such inter-sectoral comparisons because of differences in production technologies and outputs across the sectors.

## 1.3 Research methods

The research methods used in the study included:

- consultations with interested parties;
- analysis of industry statistics and past research;
- examination of selected awards and agreements;
- consideration of written responses to a research issues brief and a work-in-progress report sent to interested parties; and

- in-depth discussions with managers, employees and their representatives at selected large capital city building sites.

## Information collection and consultation

Consultations were held with a wide range of parties, reflecting the many different interests associated with building and construction. These discussions included industry and client associations, major national contractors, specialist subcontractors, and State and Federal Government departments (see appendix A for a detailed list). Around 60 meetings were held with organisations outside the Commission. Topics discussed included the focus of the workplace level analysis, selection of individual work arrangements for examination, the competitive pressures on contractors, and the role of governments.

Interested parties were also given an opportunity to provide written comments to the Commission in response to a research issues brief. This was mailed to around 150 parties. Parties that received copies of the research issues brief included industry and client associations, unions (both the CFMEU and CEPU), major national contractors, specialist subcontractors, and State and Federal Government departments. A total of 30 written responses were received (responding parties are listed in appendix B). The study was also advertised in the national press, and the issues brief was available on request.

Detailed discussions on how work arrangements operate in practice were held at five large building sites in Sydney and Melbourne (these are listed in appendix A). Those consulted included managers, supervisors, employees and representatives of the CFMEU and CEPU. The information collected was largely qualitative, reflecting the difficulty in precisely quantifying the effects of specific work arrangements. The discussions focused on:

- the types of agreements used to specify work arrangements;
- the application of individual work arrangements specified in those agreements or arising from custom and practice; and
- workplace change – its extent since the late 1980s, whether more is warranted and, if so, any impediments to it being realised.

A draft version of this report was circulated for comment to many parties outside the Commission. A first draft was sent to three independent external referees, who subsequently provided detailed comments. A revised draft, termed a work-in-progress report, was distributed in early June 1999 to around 170 interested parties. It invited general comment and listed a series of 'issues for comment', where the Productivity Commission was seeking additional information.

Organisations that received copies of the work-in-progress report included industry and client associations, state and national branches of the CFMEU and CEPU, major national contractors, specialist subcontractors, and State and Federal Government departments. It was also made available on request. Written responses to the work-in-progress report were received from 14 parties (responding parties are listed in appendix B).

## Measurement of workplace performance

The relationship between work arrangements and workplace performance was assessed using four indicators:

- labour productivity (output per unit of labour);
- unit labour cost (labour cost per unit of output);
- timeliness; and
- product quality.

Each of these performance indicators is a 'partial' measure in the sense that it quantifies a particular aspect of workplace performance. Hence, this study uses all four measures to assess performance rather than a single indicator in isolation. This is in recognition of the possibility that workplaces could perform well on one criterion and yet have a low level of performance overall.

It is not possible to quantify precisely how individual work arrangements affect the partial performance indicators. This is due to the difficulty in accurately controlling for interactions between work arrangements as well as the effects of other determinants of workplace performance. Interactions between work arrangements are an issue because, in combination, arrangements may have a mutually reinforcing effect on performance or alternatively work in opposite directions. It also needs to be recognised that work arrangements are only one of many factors that can affect performance. In the case of building projects, other important factors include design, project planning, building regulations and tendering practices. For these reasons, the impacts of work arrangements were assessed in terms of direction only.

## Selection and classification of work arrangements

Individual work arrangements were selected for analysis on the basis of the above mentioned consultations, responses to the research issues brief, and an analysis of industry agreements and past research. Following the approach of previous

Commission studies, the selected work arrangements were then divided into broad groups on the basis of how they affect flexibility at the workplace level.

For the purposes of this study, flexibility refers to the extent to which work arrangements can be continuously adapted to changing market conditions, subject to community standards on working conditions. More flexible work arrangements tend to reduce the adjustment costs associated with adapting to new market conditions and so lead to higher workplace performance than would otherwise be the case. It is for this reason that work arrangements are assessed in this study not only in terms of their impact on the previously identified partial performance indicators but also their degree of flexibility.

The broad categories of workplace flexibility used in this report are a condensed version of those developed by NEDO (1986) and OECD (1988), and used in the Commission's previous work arrangements studies. Three groups were used to categorise work arrangements on building sites:

1. communication, training and workplace safety — flexibility to change general procedures which affect workplace performance both directly through the way in which work is performed and managed, and indirectly via their impact on job satisfaction and hence worker effort and retention;
2. work hours and hiring arrangements — flexibility to adjust physical variables (size and composition of the workforce, quantity and timing of work hours, and the allocation of a given workforce between different tasks); and
3. remuneration and on-costs — flexibility to adjust financial variables to reflect changes in market conditions.

While this framework is based on an employer's perspective, it should be noted that employers can face a trade off between flexibility and the need, in a competitive labour market, to offer attractive terms and conditions of employment. For example, increased flexibility could in some cases reduce security of employment. This may in turn prompt employers to offer higher remuneration rather than face the prospect of only being able to attract and retain less productive workers (see Kelly, Evans and Dawkins (1998) for estimates of how job security affects remuneration). Hence, this study assesses workplace flexibility from both an employer and employee perspective.

## Structure of analysis

The first step in the analytical phase of this study was to develop an understanding of the environment in which observed work arrangements had evolved, including

history, the competitive pressures on employers, and government policies. The results of this research are presented in chapter 2.

Consideration was then given to how the issues raised in chapter 2 have influenced the way in which work arrangements are negotiated. The resulting types of agreements used to underpin conditions of employment were also considered in this analysis. This is the topic of chapter 3.

The analysis then focused on how individual work arrangements affect the partial performance indicators discussed above. As noted previously, the work arrangements selected for analysis were grouped into three broad categories based on how they affect workplace flexibility. These categories correspond to chapters 4, 5 and 6 of this report.

The final step in the analysis was to use the key findings of earlier chapters to assess the need, if any, for changes in work arrangements and the impediments to such change. This included consideration of the roles of different parties (including governments) in implementing change. This analysis is summarised in the concluding chapter 7.

# 2 Market characteristics

Work arrangements are derived from the market characteristics that employers face in producing and selling their output and that workers face in supplying their labour. For example, inefficient work arrangements are more likely to persist if an employer has little competition in its output market. Any analysis of work arrangements should therefore include an examination of relevant market characteristics. Otherwise, misleading conclusions may be reached about how to raise workplace performance.

In recognition of this issue, this chapter examines the key market characteristics associated with large capital city building projects. The initial focus is on the contractual system and how this makes large building projects vulnerable to industrial action. The relevant characteristics of the many parties associated with large capital city building projects are then described. These include contractors, employees, governments, employer associations and unions. Finally, the evolution of work arrangements since the late 1980s is examined.

## 2.1 The contractual chain from clients to producers

The production process for large capital city buildings is best described as project based. A one-off design is typically used and the final assembly stage must occur at a unique location. The production technology involves a complex sequence of interdependent tasks that require different types of specialist workers. For example, the expertise required for structural steelwork differs from that used for plumbing. The level and types of specialist skills used vary over the life of a building project. For example, excavators are used prior to laying foundations, whereas painters are employed at the end of a project.

Clients of large capital city building projects tend to be institutional investors or governments. They generally prefer to outsource the building process rather than bear the cost of acquiring many specialist skills unrelated to their core activities. Suppliers of construction services tend to concentrate on particular areas, such as lift installation or project management, because there are large gains from specialisation.

A variety of approaches are used to bring together the many specialist contractors required for a large building project (see box 2.1). Under a traditional tender, a team of consultants assists with design issues and, depending on the client's expertise, a consultant may be hired to prepare a design brief and appoint and coordinate contractors. Management of the construction work is delegated to a 'head contractor', which typically employs only a small workforce on site for project-wide duties, such as a crane crew and cleaners. Most of the construction work is sub-let to specialist subcontractors, which may employ around 90 per cent of workers on a site. As many as 200 subcontractors could be used on a major construction project (Construction Policy Steering Committee 1998). A stylised representation of this system is given in figure 2.1.

This system appears to be similar to the Anglo-Italian approach to building projects identified by Winch and Campagnac (1995), that externalises variability by subcontracting and focuses on controlling costs. This is in contrast to the Franco-German model they identified as internalising variability of the production process (because head contractors have a large workforce) and being more focused on quality. North American building projects appear to be closer to the traditional Australian system.

Selection of head contractors and subcontractors in Australia is often done on the basis of tender bids. The cost of market entry is low for many types of subcontracting and so the bidding process can be highly competitive at that level. Following the selection process, relationships are established between the client, head contractor and subcontractors using a complex chain of contracts. An important feature of this contractual chain is how it distributes risk between parties.

## Distribution of risk

The complex and one-off nature of large building projects makes it difficult for clients to precisely forecast completion time and cost. This uncertainty, combined with the substantial amount of funds necessary to construct large buildings, leads to high levels of financial risk for clients. They often transfer these risks onto head contractors by using fixed price building contracts that impose penalties if a building is not completed by an agreed date. These penalties, known as liquidated damages, are intended to reflect the cost of delays to the client.

Fixed price contracts became the norm in the early 1990s, as major regular clients sought to ensure greater certainty over completion time and cost than previously existed (Barda 1995). In the 1980s, delays and increases in labour costs could more readily be passed on to clients through time extension and price variation clauses in contracts.

Box 2.1 **Relationships between clients and contractors**

On a typical large building project, the client relies on a team of specialist contractors to design and erect the building. The role of each contractor and the relationship between them and the client varies depending on the type of contractual system used.

Under a **traditional tender**, the client appoints a project design team that produces comprehensive documentation for the project. Tenders, usually lump sum, are then sought from builders. The site is subsequently handed over to the successful tenderer and the client's agent administers its contract. Most of the construction work is typically sub-let by the builder to specialist subcontractors.

A **design and construct** contract involves a contractor undertaking to deliver a project, generally for a fixed cost, to meet a performance specification produced by or on behalf of a client. Unlike a traditional tender, the contractor is responsible for both the design and construction elements of the project.

With a **construction management** contract the client usually appoints a project manager and a consultancy team to produce the initial schematic design. A building contractor is then appointed as a construction manager to assist with design considerations and to organise the building process. The client makes contracts directly with the specialist subcontractors who do the construction work and is responsible for making payments to subcontractors and suppliers. The construction manager therefore has no direct commercial interest in the subcontractors' work and so is not subject to the contractual risks associated with a traditional tender.

With a **competitive negotiation** contract the client appoints a team of consultants to prepare a design up to preliminary drawings. Tenders are then called from builders for the cost of preliminaries, completion time, and a percentage for margins and off-site overheads (based on the unknown value of work). The successful tenderer then joins the consultancy team to prepare final design documentation and erect the building, often using subcontractors. This is essentially a fast tracking system. The successful tenderer is installed on site and working before formal design documentation is complete in the hope that this will lead to faster completion.

With a **cost plus** contract the client selects a builder on the basis of a tendered fee to be paid in excess of costs incurred. The fee can be a percentage of cost or a lump sum.

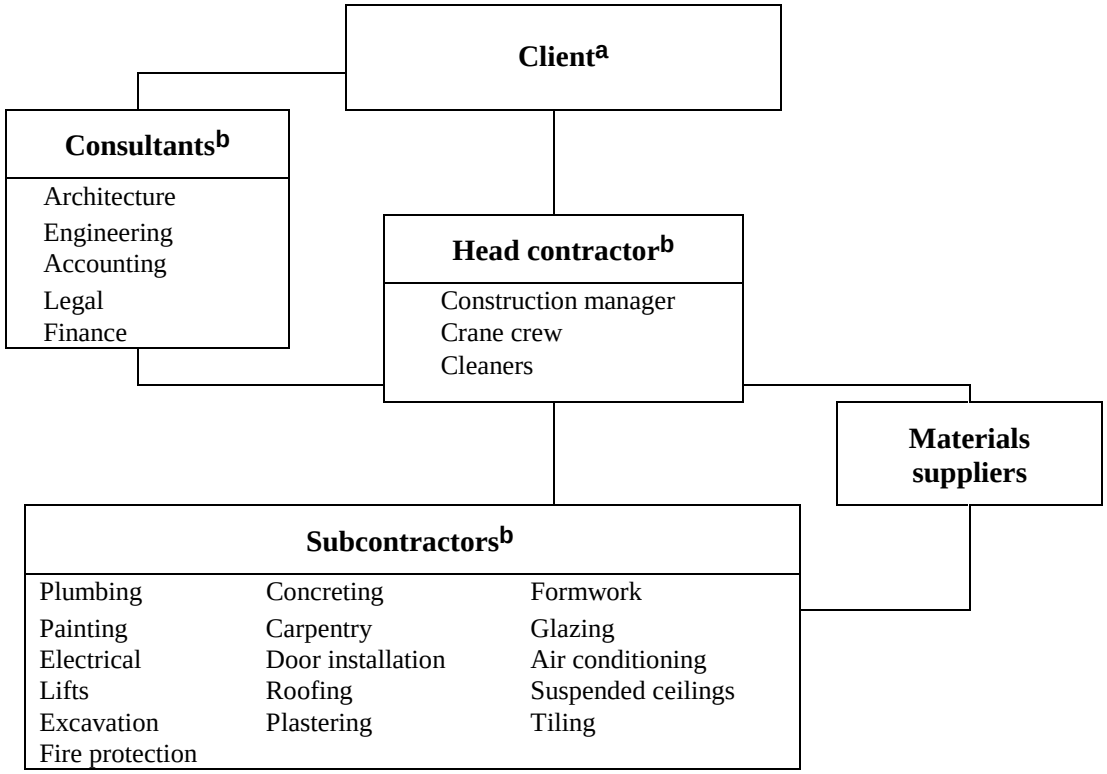
**Alliance contracting** is a relatively new concept intended to ensure that the client and its contractors operate as an alliance. This involves an arrangement where a given percentage of any difference between quoted and actual costs (that is, unanticipated cost savings or overruns) is shared between the client and its contractors. A 'no disputes clause' is used to reinforce the alliance objective.

*Sources:* Critall (1997); Guthrie (1998); Rawlinsons (1998).

While most contracts are now usually of a fixed price nature, head contractors are reimbursed if a client causes costs to rise by, for example, varying the design. Cost increases not attributable to either party are usually shared. For example, delays

caused by inclement weather and industry-wide strikes entitle head contractors to time extensions and exemption from liquidated damages. In contrast, head contractors are liable for the cost of a delay to the client when it is caused by a site-specific dispute (Critall 1997).

Figure 2.1 **Stylised representation of a traditional tender**




**a** A consultant may represent the client when it lacks the technical and organisational expertise to coordinate a large building project. **b** The list of occupations and tasks is given as an example and is not intended to be exhaustive.

*Sources:* Adapted from Industry Commission (1991) and Rawlinsons (1998).

A portion of the risk transferred from a client to its head contractor is passed down the contractual chain to each subcontractor. That is, subcontractors also face penalties for delays and are paid a fixed price for their services. The contractual system thus provides a strong incentive for both head contractors and subcontractors to complete their work on time and within budget. Indeed, consultations with interested parties suggest that liquidated damages have rarely, if ever, been imposed.

While this system motivates high performance, it can lead to adversarial relationships. For example, contractors may attempt to enhance their profits at the expense of clients by building to a lower quality (Industry Commission 1991). Such problems have led some parties to promote the less adversarial approach of alliance

contracting (see for example Guthrie 1998) (see box 2.1 for an explanation of alliance contracting).

Tension over contractual relationships is not confined to Australia. A team of engineers in the United States observed that the atmosphere of construction is fractious because firms often devote as much energy to shifting costs as they do to the process of solving problems (O'Brien, Fischer and Jucker 1995). Winch and Campagnac (1995) argued that British building contracts also create problems because they can shift large financial risks from clients to undercapitalised subcontractors and labour-only gangs which have little capacity to manage it.

## 2.2 Vulnerability to industrial action

Large capital city building projects are vulnerable to industrial action because:

- the cost of delays is high;
- head contractors control building sites but subcontractors bear most of the labour costs;
- union membership is effectively compulsory (see section 2.5); and
- legal remedies against industrial action appear to have been ineffective.

As noted previously, head contractors face large financial penalties for delays caused by site-specific industrial action (this is a feature of fixed price building contracts). These penalties could amount to a large proportion of a head contractor's profit on a project, which typically have low margins (see section 2.3). In contrast, increases in the cost of employing construction workers have little impact on head contractor profits because subcontractors employ most workers. Hence, the pressure on head contractors to minimise site-specific industrial disputes can outweigh the incentive to contain the cost of employing construction workers. This is significant because head contractors control large capital city building sites.

As the size of a building project increases, so does the cost of delays. Thus, the vulnerability of building projects to industrial action is most acute on large projects where there is extensive subcontracting. Head contractors attempt to minimise disputes on such projects by requiring subcontractors to have a union endorsed enterprise agreement. This is usually made a condition of tendering for a project. Subcontractors are also usually required to make a special payment to their employees, termed a 'site allowance' in most states (see chapter 6). This allowance tends to increase with project size and proximity to the central business district (CBD). It is seen, in part, as a means of buying industrial peace.

Subcontractors are usually informed prior to tendering about the costs of working on a particular site. Given that most areas of subcontracting are competitive, subcontractors have limited capacity to absorb the additional costs and so probably raise their tender bids accordingly. It is likely that these costs are in turn passed on to clients in higher tender bids by head contractors, given that they tend to operate on low profit margins. Where an unexpected increase in labour costs does occur during the life of a project, subcontractors have limited opportunity to pass it on because their work is governed by a fixed price building contract.

There is less pressure to minimise delays associated with industry-wide industrial action. Fixed price contracts have conditions enabling head contractors to claim time extensions and exemptions from financial penalties in such circumstances. This is appropriate, given that a single head contractor has limited control over industry-wide disputes. However, subcontractors still bear a cost in these disputes. Their resources (capital equipment and permanent employees) would move from project to project at a faster rate and so generate greater income if there were fewer dispute related delays.

Industry-wide strikes are often 'unprotected industrial action' as defined by the *Workplace Relations Act 1996* (WRA 1996) and so employers could theoretically seek legal remedies. This option is rarely used because it can be costly, slow to reach a final outcome, and may generate a site-specific dispute which would enable the client to impose financial penalties on the head contractor. As a result, large capital city building projects remain vulnerable to industry-wide strikes. There appears to have been a shift towards such strikes in recent years (see section 2.8).

The Federal Government proposes to strengthen remedies against unprotected industrial action through the *Workplace Relations Legislation Amendment (More Jobs, Better Pay) Bill 1999* introduced into Parliament on 30 June 1999. The Bill would oblige the Australian Industrial Relations Commission (to be renamed the Australian Workplace Relations Commission) to issue orders to stop or prevent unprotected industrial action within 48 hours of an application being made (Reith 1999).

## 2.3 Contractor characteristics

According to ABS industry statistics, around 85 per cent of building and construction enterprises had less than five employees in September 1997. Only 5 per cent had more than nine employees. The prevalence of small businesses appears to be due to the low cost of market entry in many types of subcontracting, large gains from specialisation (diseconomies of scope), and limited opportunities to achieve

economies of scale because production has to occur at a client's site. However, the strength of these factors varies between sectors and specialist tasks.

The cost of market entry is greatest for tasks that require a sizeable investment in capital equipment. On large capital city building sites, examples of this include lifts and large-scale air conditioning systems. It appears that there are fewer subcontractors providing these services and that these firms have larger workforces than the building and construction average.

Economies of scale are probably greater on large capital city building projects because of their size. On the basis of the workplace level information collected for this study, it does appear that many subcontractors on such projects are larger than the building and construction average. Some scale economies have also been achieved by off-site prefabrication.

However, reasons other than economies of scale may explain why subcontractors working on large capital city building projects are larger than average. For example, enterprise agreements often contain clauses that restrict the extent to which subcontractors can sub-let tasks to other subcontractors (known as pyramid subcontracting) (see chapter 5 for details). Another possible explanation is that head contractors may prefer to outsource each specialist task to a single subcontractor to save on administrative and management costs.

The need for the final stage of production to occur on a client's site limits the geographic area in which specialist suppliers of construction services can compete. As a result, subcontractors tend to confine their activities to their locality. This has enabled differences in work arrangements to develop between regions (later chapters provide examples).

Head contractors have relatively unusual characteristics. They include the largest firms in building and construction and many have national operations. This appears to be due to the economies of scale and geographic mobility that can be achieved by extensive subcontracting and a focus on site management rather than physical construction work.

ABS financial statistics suggest that building and construction enterprises bear higher than average levels of risk. In particular, they tend to operate on smaller profit margins and have higher debt to equity ratios (table 2.1). The data in table 2.1 also show that building and construction enterprises are compensated for their greater risk through higher, but more volatile, returns on net worth. There appear to be significant differences in risk and profitability based on enterprise size. However, these statistics should be interpreted with caution because they are aggregated over the three sectors of building and construction.

Table 2.1 **Financial characteristics of enterprises[a]**

| | *1991-92* | *1992-93* | *1993-94* | *1994-95* | *1996-97* | *1997-98* |
|---|---|---|---|---|---|---|
| **Large building and construction enterprises[b]** | | | | | | |
| Return on net worth (per cent) | 14.4 | 16.3 | 30.1 | 17.4 | 11.8 | 23.5 |
| Profit margin (per cent)[c] | 2.1 | 2.7 | 4.4 | 2.5 | 1.7 | 5.0 |
| Long term debt to equity (times) | 0.9 | 1.5 | 1.2 | 1.3 | 1.1 | 1.4 |
| **Small and medium building and construction enterprises[d]** | | | | | | |
| Return on net worth (per cent) | 34.9 | 63.7 | 59.3 | 78.5 | 44.3 | 40.8 |
| Profit margin (per cent)[c] | 4.1 | 5.6 | 5.1 | 7.4 | 5.3 | 5.0 |
| Long term debt to equity (times) | 1.1 | 2.1 | 1.4 | 1.2 | 0.9 | 0.6 |
| **All industries** | | | | | | |
| Return on net worth (per cent) | 8.9 | 12.1 | 13.0 | 13.2 | 12.6 | 14.4 |
| Profit margin (per cent)[c] | 6.0 | 8.7 | 9.3 | 9.3 | 9.2 | 9.3 |
| Long term debt to equity (times)[e] | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |

**a** Enterprises are defined as the largest unit within a business for which detailed accounts are kept on at least a quarterly basis. For most businesses, particularly the smaller ones, it will equate with the legal entity owning the business. **b** Enterprises that employ over 200 persons or have assets worth more than $200 million. **c** Percentage of the total income of the business (excluding extraordinary items) available as pre-tax profit. **d** Enterprises that employ less than 200 persons and have assets worth less than $200 million. **e** Excludes finance and insurance enterprises.

*Sources:* ABS (*Business Operations and Performance: Australia*, Cat. no. 8140.0; unpublished data).

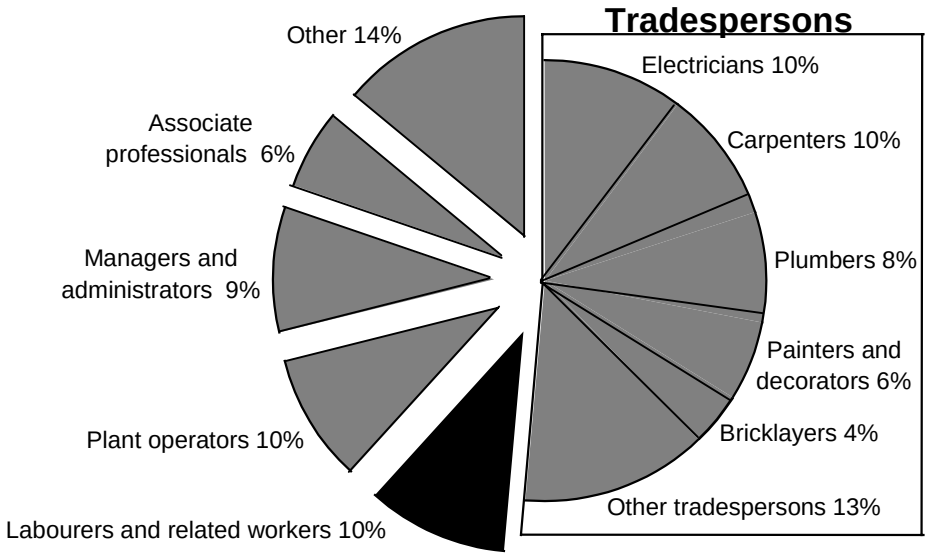
## 2.4 Workforce profile

According to ABS statistics, the building and construction workforce has a similar age distribution and share of overseas born workers to the total Australian workforce. Analysis by NCVER (1998) found that the age distribution of building and construction workers is only slightly more concentrated in the 25 to 45 year old range than the overall workforce.

Most building and construction workers are males. In 1997-98, adult males working full-time accounted for 81 per cent of all building and construction workers. A further 6 per cent were males working on a part-time basis. Females accounted for the remaining 13 per cent (5 and 8 per cent working full and part-time respectively) (ABS 1998f).

ABS labour force statistics show that 51 per cent of building and construction workers were tradespersons in 1997-98, which was much higher than the economy-wide average of 14 per cent (ABS 1998f). The relative importance of specific trades in building and construction is shown in figure 2.2, based on more detailed data from the 1996 census.

Figure 2.2 **Building and construction workforce by occupation, 1996**




*Data sources:* ABS (*Census of Population and Housing*, 1996, Cat. no. 2031.0; unpublished data).

Census data show that trades qualifications were the highest educational attainment of 44 per cent of building and construction workers in 1996. Only 42 per cent of building and construction workers had no post school qualifications, which was less than the economy-wide average of 49 per cent. However, analysis by CTA (1998) revealed that the English literacy and numeracy skills of the building and construction workforce are considerably below the economy-wide average.

According to ABS industry statistics, the average duration of employment in building and construction is not significantly different from the economy-wide average (ABS 1998g). However, ACIL Economics (1993) found that ABS statistics underestimate job mobility in building and construction because there are a large number of self-employed workers. In a 1998 survey of members of the Construction and General Division of the CFMEU (1999a), 38 per cent of respondents stated that they change employers at least once a year. This result may be more representative of job mobility on large capital city building projects than that indicated by ABS statistics, given that CFMEU members typically work on larger commercial projects (see section 2.5). This conclusion is supported by the results of a broader survey of union members undertaken by Wallis Consulting Group Pty Ltd (1999). That survey found that the average duration of employment in building and construction was well below the economy-wide average.

In 1997-98, self-employed workers accounted for 27 per cent of the building and construction workforce, compared to an economy-wide average of 10 per cent (ABS 1998f). The extent of self-employment in building and construction is

probably even higher than that indicated by ABS statistics. This is because people working in their own incorporated business are defined by the ABS as being employees.

Around 30 per cent of building and construction employees worked for paid overtime in 1997-98, compared to an economy-wide average of 15 per cent. Average weekly paid overtime for people undertaking such work was around 9 hours in building and construction in 1997-98, compared to an economy-wide average of 7 hours (ABS 1998d).

On the basis of the workplace level information collected for this study, it appears that, like building and construction as a whole, male full-time workers account for most of the workforce on large capital city building sites. It also appears that relatively high levels of paid overtime are worked. This often exceeds 10 hours per worker on large capital city building sites, due partly to the frequent practice of working on Saturdays (see chapter 5 for details).

However, the workforce on large capital city building projects differs from other areas of building and construction in some important respects. Most notably, workers on large capital city building sites are more likely to be employees rather than self-employed. They also appear to be relatively unusual among building and construction employees because they tend to work for firms larger than the building and construction average.

## 2.5 Role of governments and collective organisations

Governments, employer and industry associations, and unions do not construct large capital city buildings but they do influence the work arrangements used to produce them. For governments, this is linked to their roles as clients, policy makers and regulators. Employer associations have influence through their collective bargaining of work arrangements on behalf of contractors. Unions play a similar role for employees.

### Governments

There has been a trend away from governments owning large capital city buildings, particularly offices, and so their role as clients of such buildings is shrinking. However, governments indirectly influence work arrangements on large capital city building sites through their purchasing power in other types of building and construction. According to ABS statistics, government clients accounted for about 60 per cent of the value of work done in engineering construction and around 30 per

cent in non-residential building in 1997-98 (ABS 1998b, 1998c). Governments are also influential through their public policy and regulatory activities.

The use of purchasing power by governments is most evident in the use of codes of practice for government projects. Federal, State and Territory Governments agreed on a National Code of Practice for the Construction Industry in 1997. Any party wishing to work on government projects is required to comply with the Code. This involves adopting the principles of freedom of association and not coercing any other party to use specific types of work arrangements (APCC 1997). The private sector was encouraged to adopt the National Code on a voluntary basis.

New South Wales, Victoria, Western Australia, South Australia, and the Northern Territory have their own codes of practice which are consistent with the National Code. The Federal Government has developed detailed implementation guidelines for the National Code which are applied to its projects (see DWRSB and DOFA 1998). These guidelines emphasise the primacy of enterprise level determined work arrangements, and that coercion of subcontractors to achieve industry-wide or pattern outcomes is unacceptable. A breach of the Federal Government's implementation guidelines may result in exclusion from future government work and publication of details of the breach.

The New South Wales code of practice has been in operation since 1992. The current implementation guidelines (released in 1996) cover a wider range of issues than the Federal equivalent but have broad similarities on industrial relations matters. Notable exceptions are the New South Wales code's wider range of industry consultation, encouragement of willing union membership, and that site allowances can be paid into industry redundancy and superannuation funds or as top up cover for workers' compensation (Construction Policy Steering Committee 1996a, 1996b).

Government intervention in the work arrangements of private enterprises is based on the presumption that markets would not otherwise produce efficient or equitable outcomes. For building and construction, governments are active in areas such as workplace safety, training, and the process for documenting work arrangements in written agreements. For example, governments have taken actions to establish safety standards, license tradespersons, and maintain a system for the registration of awards and enterprise agreements.

The New South Wales Government has also developed a comprehensive industry plan for building and construction (Construction Policy Steering Committee 1998). This is intended to create an industry that is 'seamless', efficient and profitable, innovative, and environmentally responsible. The New South Wales Government has specified 85 actions it will take to achieve this vision. This includes requiring

those tendering for government projects to submit project-specific 'Industrial Relations Plans' against which their performance would subsequently be assessed. A Construction Industry Consultative Committee has also been established to provide an opportunity for non-government parties to discuss and provide advice on industrial relations issues. This Committee has developed a handbook on industrial relations issues for small subcontractors in building and construction (DIR 1999).

At the Federal level, there are statutory agencies that promote the Government's workplace relations agenda. Most notably, the Office of the Employment Advocate (OEA) has responsibility for the enforcement of provisions of the WRA 1996 relating to freedom of association and coercion in agreement making (see OEA 1999a, 1999b for examples). The building and construction industry accounts for around 50 per cent of all complaints made to the OEA (Hamberger 1999). Similarly, the Australian Competition and Consumer Commission (ACCC) has acted against alleged breaches of the *Trade Practices Act 1974* by union officials in building and construction (see for example ACCC 1998).

## Employer and industry associations

There are many employer and industry associations in building and construction, reflecting the wide range of specialist skills used (see box 2.2). The associations with the greatest influence over work arrangements on large capital city building projects appear to be the Master Builders' Association (MBA) in each state and the associations for electrical and plumbing employers. They often negotiate work arrangements collectively on behalf of employers and are named as parties to awards.

The economic case for employer associations to negotiate work arrangements has two elements. First, the cost of negotiating work arrangements can be high for the many small subcontractors in building and construction. Hence, there is merit in smaller subcontractors using employer associations to negotiate on their behalf. However, this should not prevent any subcontractor from negotiating its own work arrangements if it wishes. The negotiation cost argument in favour of collective bargaining on the producer side weakens as the size of a contractor increases. Indeed, the Australian Constructors Association (ACA), whose members are large head contractors, does not represent its members in work arrangement negotiations. Head contractors tend to negotiate their work arrangements directly with their employees and the relevant unions.

Second, virtually all employees on large capital city building projects negotiate their work arrangements collectively via a major union. Employer associations also

enable small subcontractors to negotiate collectively, ensuring that the relative bargaining strengths of employers and employees are more balanced.

Box 2.2 **Employer and industry associations in building and construction**

Employer and industry associations can be divided into general associations, which cover more than one trade (and in some cases sectors), and trade associations.

*General associations*

An independent **Master Builders' Association (MBA)** exists in every state and the ACT. The Northern Territory equivalent is the Territory Construction Association. These Associations represent employers in all areas of building and construction. Collectively, they have around 17 000 members, most of which are small businesses. Each state and territory Association is also a member of a national organisation called Master Builders Australia Inc..

The **Australian Constructors Association (ACA)** represents 17 companies involved in building and construction, most of which are large national head contractors. It is not a registered industrial organisation and does not represent its members in work arrangement negotiations. However, the ACA does retain an interest in industrial relations policies that affect building and construction.

The **Civil Contractors Federation (CCF)** and the **Housing Industry Association (HIA)** represent contractors working on civil engineering and residential projects respectively. They have state and territory branches.

The **Australian Industry Group (AIG**) represents employers across many sectors of the economy, including building and construction. It also provides a secretariat for the ACA.

*Trade associations*

There are numerous trade based associations with state branches, reflecting the wide range of specialist skills used in building and construction. Examples include:

- the Air Conditioning and Mechanical Contractors' Association;
- the Master Painters' Association;
- Master Plumbers Australia and its competitor, the Master Plumbers' and Mechanical Services Association of Australia; and
- the National Electrical and Communications Association (NECA).

However, firms can find it difficult to negotiate work arrangements collectively because they are competitors in the product market. Similarly, it is difficult for the many employer associations in building and construction to negotiate as a group because they are often competing for the same membership. This was evident during the simplification of a national building award in 1998, when a single union was

able to take advantage of differences in the negotiating position of the MBA compared to that of the Australian Industry Group (AIG).

## Unions

In essence, there are only two unions representing employees on large capital city building sites: the CFMEU and the CEPU (see box 2.3). Both are the products of incomplete union amalgamations. However, this has not prevented either union from negotiating collectively on behalf of its members.

The CFMEU and the CEPU are most active on large building and construction projects. These projects enable unions to achieve economies of scale because there are many workers to represent at a single location and these workers tend to be employees. In contrast, union presence in residential building is virtually non-existent because most projects are small and workers are typically self-employed.

### *Extent of union membership on large building projects*

According to ABS statistics, the share of building and construction employees who are union members fell from 47 per cent in August 1988 to 34 per cent in August 1997 (ABS 1997). This was probably due to the abolition of compulsory unionism (no-ticket-no-start) on commercial building and construction sites (large and small) in the early to mid 1990s. For example, McGrath-Champ (1996) reported that the end of no-ticket-no-start in New South Wales in 1991 led to a major decline in the CFMEU's membership.

The abolition of compulsory unionism would have created an incentive for employees to 'free ride' by receiving any benefits negotiated by unions without the expense of membership fees. In addition, there would have been employees who did not want to join a union but were previously compelled to do so (see below for an example). A further pressure on union density (the share of employees who are union members) has come from the tax system, which provides an incentive for building workers to be self-employed rather than employees (see chapter 6).

However, it appears that ABS data mask significant differences in union density between building projects of different sizes. Most parties consulted for this study claimed that de facto compulsory unionism still applies on the largest commercial building sites in or near the central business districts of Sydney, Melbourne and Brisbane.

Box 2.3 **Building and construction unions**

There are two main unions representing employees on large capital city building projects:

- the Construction and General Division of the Construction, Forestry, Mining and Energy Union (**CFMEU**); and
- the Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union (**CEPU**).

In practice, each union operates as a coalition of autonomous groups that were formerly independent unions. There is also a degree of autonomy between state branches within each group.

The **CFMEU** is the main union on large capital city building sites. It covers all labourers, most operators of plant and equipment, and all tradespersons other than plumbers, electricians, fitters, boilermakers, and air conditioning and lift mechanics. The CFMEU was formed in 1992, with much of the Construction and General Division's membership coming from the former Building Workers' Industrial Union. In Queensland, South Australia and Western Australia, the Builders Labourers Federation remains autonomous from the rest of the CFMEU. Similarly, in some states the CFMEU includes the autonomous Federated Engine Drivers' and Firemen's Association (FEDFA), which has coverage of materials handling employees.

The **CEPU** includes two autonomous groups that represent electricians and plumbers on large capital city building projects. The two groups are the Electrical Trades Union (ETU) and the former Plumbers and Gasfitters Employees' Union (PGEU).

The other main unions covering building and construction employees are:

- the Australian Workers' Union (AWU), which covers civil engineering projects; and
- the Australian Manufacturing Workers' Union (AMWU), which represents employees in metals and engineering manufacturing.

These last two unions represent few employees on large capital city building projects.

*Sources:* O'Brien 1998; DWRSB 1998c; Mitchell 1996.

Unions are in a strong position to ensure the maintenance of no-ticket-no-start on large capital city building projects because of the greater vulnerability of such projects to industrial action. For example, one subcontractor consulted in this study claimed that he was forced to relocate an employee from a large building site to a small one (where the union was not active) because the employee refused to be a union member. It was alleged that union officials threatened to close the large building site if the employee was not removed. Other parties argued that employees follow union directions because they are afraid that they cannot work on large building sites otherwise.

The maintenance of high union coverage on larger building projects is consistent with the findings of an economy-wide survey of union members undertaken by Wallis Consulting Group Pty Ltd (1999) for the OEA. That survey found that among union members working on all types of building and construction sites:

- 33 per cent were told that they had to be a union member or were expected to join a union when they started work with their present employer (compared to an economy-wide average of 20 per cent);
- 34 per cent felt under pressure to remain a union member (compared to an economy-wide average of 17 per cent); and
- 46 per cent said that they might decide not to be a union member if they had more choice (compared to an economy-wide average of 20 per cent).

This survey also found that 36 per cent of building and construction union members were dissatisfied with the services provided by their union (compared to an economy-wide average of 25 per cent). However, in a separate survey sponsored by the CFMEU, only 11 per cent of members in its Construction and General Division rated its performance as poor or very poor (CFMEU 1999b).

Other data released by the Construction and General Division of the CFMEU indicate that the size of its membership is currently at its highest level since the early 1990s recession. As at 30 March 1999, it had 74 500 financial members (Field 1999). However, this could reflect the increased number of large building projects in recent years rather than the maintenance of a high rate of CFMEU membership on commercial building projects of all sizes. The data released by the Construction and General Division of the CFMEU confirm that its membership growth has largely been in New South Wales and Victoria, where building activity has been growing strongly. Membership has been falling in the smaller states where demand for large buildings has been low.

Some parties consulted for this study claimed that unions are able to monitor compliance with the no-ticket-no-start policy on large building sites through their involvement in site safety inductions and verification of payments to portable benefit schemes (for example, Civil Contractors Federation (Victoria), Response 44, p. 2). Workers must undertake a safety induction before they commence working on a particular building site. This training is typically conducted by the site's safety officer, who is usually also the union delegate (termed shop steward in Victoria). In addition, the WRA 1996 gives union officials the right to inspect pay sheets and associated documents when they suspect that employees have not received their full entitlements under the relevant award or enterprise agreement. Parties consulted for this study indicated that this is used by union officials to inspect membership cards

for portable benefit funds, such as for redundancy and superannuation. These cards can specify the employee's union membership number, thus providing a further check on compliance with no-ticket-no-start. Unions usually have a major role in the management of the portable benefit funds (see chapter 6).

Other factors which may contribute to high union density on large capital city building sites are the relatively high mobility of workers between employers (and locations), making their loyalty to unions generally greater than to any one employer, and the importance that unions have placed on safety issues.

### *Impact of unions*

There are positive and negative effects associated with building and construction unions. On the one hand, building and construction unions can play a positive role as a collective voice for employees to prevent any victimisation, by facilitating communication on sites and in ensuring any safety issues are addressed.

On the other hand, unions have market power in negotiations over work arrangements. As noted previously, building and construction unions have a strong negotiating hand because large capital city building sites are inherently vulnerable to industrial action and most workers on such sites are union members. The market power that high union density gives unions can lead to the adoption of work arrangements that involve lower worker effort and reduced total factor productivity. This was clearly a feature of large capital city building projects in the late 1980s (see section 2.6 for details).

It appears, however, that some of the negative effects have diminished since the late 1980s. In particular, the problems which, in part, led to the deregistration of the Builders Labourers Federation (BLF) in the Federal, New South Wales and Victorian jurisdictions in 1986 are no longer so evident. Former BLF members were initially absorbed by the Building Workers' Industrial Union (BWIU) and the Federated Engine Drivers' and Firemen's Association (FEDFA). The BWIU and FEDFA agreed to amalgamate in order to establish an industry union (the CFMEU) which would prevent BLF officials from recreating a labourers' union in New South Wales and Victoria (Gyles Royal Commission 1992c). This was a difficult period for the building industry, as the BWIU and FEDFA struggled to demonstrate their ability to win benefits for former BLF members.

Consultations for this study revealed a widespread view that there has generally been an improvement in the attitudes of unions since the late 1980s and that union amalgamation has reduced demarcation disputes. However, problems still occur and there appear to be significant regional variations. Allegations persist that union

officials are coercing subcontractors (via head contractors) to follow union determined work arrangements (see for example ACCC 1998; OEA 1999a, 1999b). In addition, many parties consulted for this study felt that the Victorian branches of the CFMEU and the CEPU (particularly the electrical division) are less flexible than their New South Wales and Queensland counterparts. One party used the example of a virtually identical building erected in both Victoria and New South Wales to illustrate this. It was claimed that the Victorian project experienced a significantly higher level of dispute related delays than its New South Wales equivalent.

## 2.6 Work arrangements in the late 1980s

The latter half of the 1980s was a period of rapid demand growth for large capital city building projects. According to broad ABS data, the real value of non-residential building grew by almost 40 per cent during 1985-86 to 1989-90. Skill shortages became evident as a result, such as poorly trained employees and inexperienced site managers. The latter phenomenon was often evident in poor management skills by employers, including a tendency to take a master-servant approach to their employees (Industry Commission 1991; Ireland 1988).

Skill shortages gave employees a strong negotiating hand with employers, which was used by unions in their struggle to represent former BLF members in Sydney and Melbourne (Gyles Royal Commission 1992c). This led to a proliferation of inefficient work arrangements, examples of which are given in box 2.4.

The prevalence of inefficient work arrangements in the late 1980s, including low levels of management skills, varied markedly between regions. The greatest problems appear to have existed on large building projects in Sydney and Melbourne. Technical Resources Pty Ltd (1991) estimated that an identical commercial building project would have cost 16 per cent less in Brisbane than Sydney or Melbourne in late 1991 (excluding land costs). It argued that the cost difference between Melbourne and Brisbane would have been even larger in the late 1980s when non-residential building demand was growing rapidly.

A major source of inefficiency on large building sites in the late 1980s was time lost due to industrial disputes and inclement weather. In the 1980s, contracts often enabled unanticipated costs associated with disputes to be passed onto clients. This has now been partially constrained by the move to fixed price contracts.

## Box 2.4 Examples of inefficient work arrangements in the late 1980s

A wide range of inefficient work arrangements existed on large commercial building sites in the late 1980s. Some of the more notable examples are listed below.

**Inclement weather procedures**

Time off with full pay during inclement weather was considered an automatic entitlement by employees (Lovell 1993). This led to the following problems:

- an unreasonable interpretation of what constituted inclement weather;
- employees refusing to transfer to dry work areas when available; and
- all employees stopping work even if they were under cover (one-out-all-out).

**Safety procedures**

Employees are entitled to time off on full pay if they are unable to work because of a safety problem in their work area. This procedure was abused in the following ways:

- all employees stopped work even if only a small area of a site was unsafe; and
- contrived safety breaches were used as a de facto means of getting strike pay.

**Materials handling**

Material handling crews used their strategic position on building sites to extract large benefits from employers. Examples included:

- large payments to crane crews just to come to work;
- a full crane crew having to be present during the erection and dismantling of a tower crane, despite this work being done by riggers; and
- double crews of crane drivers and dogmen being employed for each crane.

**Demarcation between occupations**

Demarcation between different unions led to unreasonable restrictions on what work could be done by each employee. Examples included:

- back up crane crews not able to be employed elsewhere on site doing labouring jobs because of demarcation between FEDFA and BWIU members; and
- the use of specialist scaffolding crews despite there being many instances where it was more practical to use an idle tradesperson to erect or change scaffolding.

**Work hours**

Notable inefficiencies resulted from:

- overtime having to be offered to all employees on site (one-in-all-in); and
- late starts, early finishes and extended meal breaks.

*Sources:* Gyles Royal Commission (1992d, 1992e); Lovell (1993); Ireland (1988).

Ireland (1988) analysed 25 commercial building projects in Sydney, Melbourne and Brisbane in 1987. He found that industrial disputes increased construction time by an average 17 per cent and inclement weather by 8 per cent. In comparison, the average time lost from industrial disputes and inclement weather on projects he surveyed in the United States and the United Kingdom was close to zero. A later survey by Ireland (1991) found that average lost time in Australia was also higher than in Germany, Sweden and Canada.

Within Australia, large building projects compared poorly to other building and construction sectors. For example, industrial disputes on civil engineering projects increased construction time by only 1 per cent on average (Gyles Royal Commission 1992b).

For CBD office buildings, lost time tended to be even higher than the commercial building average. A survey for the Gyles Royal Commission (1992a) found that, on average, lost time almost doubled the time to complete office buildings in Sydney. The causes were split almost equally between industrial disputes and inclement weather. Ireland (1990) obtained similar results in a survey of high rise office projects in the Sydney CBD. He found that, on average, industrial disputes increased construction time by 23 per cent and inclement weather by 21 per cent.

## 2.7 The reform process of the early 1990s

By the early 1990s, the need for reform was widely recognised (CIDA 1995). Building demand had collapsed with the recession, the industry's inefficiencies were widely publicised by several notorious projects in Sydney, and trust between clients and contractors had broken down (Brown 1998). According to ABS data, the real value of non-residential building work fell by 40 per cent from 1989-90 to 1992-93 (ABS 1998b).

The Federal and New South Wales Governments had a central role in promoting reform but they used very different approaches (McGrath-Champ 1996). The New South Wales Government focused on eliminating illegal activities by establishing the Gyles Royal Commission, whereas the Federal Government used a consultative approach.

The Gyles Royal Commission (1992e) concluded that 'almost total industrial anarchy' existed on large Sydney building sites because unions behaved irresponsibly and head contractor employees were incapable of managing sites in an industrially effective manner. Successful tenderers were found to be paying competitors 'unsuccessful tender fees' and industry associations 'special fees'.

Evidence of individual corruption was also uncovered, such as managers accepting private work at little or no cost from subcontractors, theft of building materials, and false invoicing (Brown 1998).

The Gyles Royal Commission recommended deregistration of the CFMEU and that advice be sought on whether the New South Wales MBA should also be deregistered. The New South Wales Government responded by initiating deregistration proceedings against the CFMEU, taking action to recover hidden fees from contractors and industry associations, and developing a code of practice for government projects which, among other things, required voluntary unionism. It also maintained a Building Industry Task Force (BITF) established during the Gyles Royal Commission to investigate and prosecute criminal activities. O'Brien (1998) argued that the existence of the BITF often inspired building site managers to stand up to union demands where normally they would have capitulated. However, by late 1995 New South Wales had shifted towards the more consultative approach of the Federal Government by abolishing the BITF, halting CFMEU deregistration proceedings, and easing its prohibition of compulsory unionism (McGrath-Champ 1996; O'Brien 1998).

The Federal Government's reform strategy was based on an in-principle agreement signed by industry associations, unions, and the Federal, Victorian and Queensland Governments in December 1991 (the governments of Western Australia, South Australia and the ACT signed the following year). The parties acknowledged that 'more efficient and flexible work practices and arrangements' were 'essential in the industry' and agreed to 'encourage the development of workplace bargaining to further devolve industrial relations responsibilities' (Barda 1995). A Construction Industry Development Agency (CIDA) was established to promote the agreement's agenda between 1992 and 1995.

CIDA developed twenty action plans to be implemented by teams of industry practitioners. According to McGrath-Champ (1996), much was achieved but the team focusing on inefficient work arrangements was unable to reach a consensus. Critics, such as O'Brien (1998), argued that unions were able to block reform. However, unions were not the only parties wary of change. Many industry associations seemed unconvinced about the benefits of enterprise bargaining when CIDA circulated a draft framework enterprise agreement for public comment (Barda 1995).

CIDA eventually abandoned its team-based approach for work arrangements and instead drafted a compact for change that would ultimately be signed by industry associations and unions in 1995 (ACIC 1995). However, this condoned restrictions on some types of subcontracting and endorsed the then legal union preference

clauses in federal awards. With the arrival of a new (Liberal-National Party coalition) Federal Government in March 1996, the compact lapsed.

## 2.8 Changes in performance

Most parties consulted for this study argued that the efficiency of large capital city building projects has improved significantly since the late 1980s (later chapters detail changes in individual work arrangements). This was usually attributed to the severe downturn in building activity during the early 1990s recession, which put considerable pressure on contractors to increase efficiency, and reduced the market power of building unions. Other notable factors leading to workplace change were the greater use of fixed price building contracts and the reduction in inter-union rivalry due to union amalgamations.

In New South Wales, an important additional pressure for change was the Gyles Royal Commission and the subsequent initiation of deregistration proceedings against the CFMEU. This contributed to a change in attitudes by all parties, especially in terms of behaviour regarding industrial disputes.

However, evidence is mixed on whether there have been significant and durable changes that will raise long term performance in all states. In particular, there are widespread concerns that large building projects remain vulnerable to industrial action.

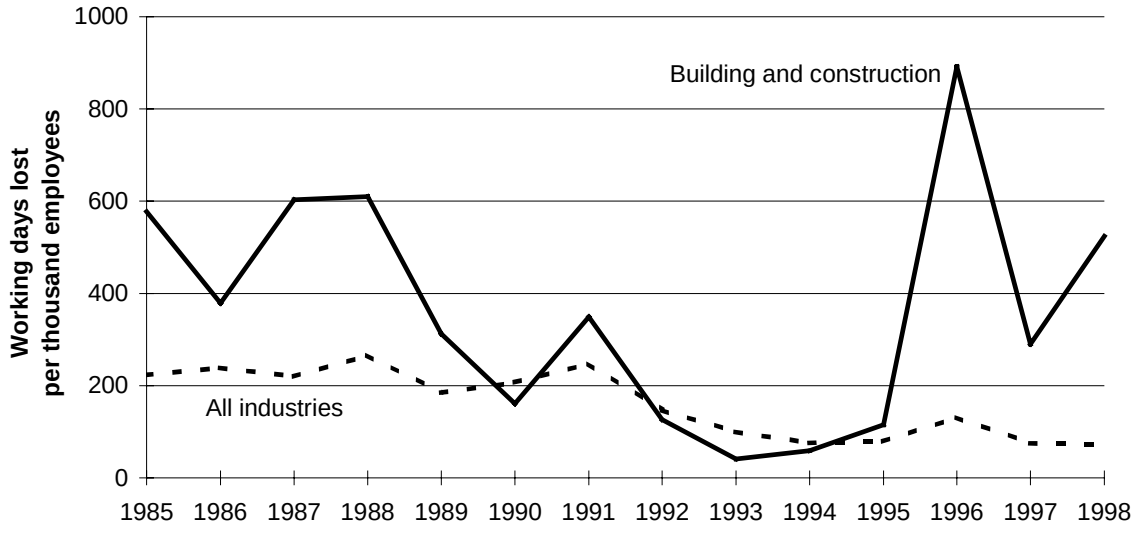
It is relevant in this respect that building and construction is essentially a non-traded industry and so there is no direct competition from imports, or even from different cities within Australia (which is why work arrangements can differ between states). Nevertheless, building and construction inputs (such as capital and labour) are to some extent mobile across state and national boundaries. This could provide indirect pressure to adopt more efficient work arrangements. While competition within a particular city is often strong, the impact that this has on workplace change is constrained by the vulnerability of large capital city building projects to industrial action.

### Industrial disputes

The rate of dispute related delays in building and construction fell to near the economy-wide average during the reform period (and recession) of the early 1990s but has since returned to relatively high levels (figure 2.3). The high rate of delays in 1996 was partly due to a one-off dispute regarding the withdrawal of a tax

exemption on travel allowances. Nevertheless, there does appear to have been an upward trend in dispute related delays in recent years.

Figure 2.3 **Rate of dispute related delays**




*Data sources:* ABS (*Industrial Disputes, Australia*, Cat. no. 6322.0; unpublished data).

While the data used in figure 2.3 are for building and construction as whole, they are probably indicative of dispute related delays on large capital city building projects. The surveys conducted by Ireland (1988, 1990, 1991) and the Gyles Royal Commission (1992a, 1992b, 1992d, 1992e) showed that dispute related delays in building and construction were concentrated on large non-residential building projects.

Many of the parties consulted for this study claimed that there has been a decline in the rate of site-specific disputes since the late 1980s. Thus, it appears that the upward trend in dispute related delays in recent years is due to a significant increase in industry-wide disputes.

The increased prevalence of industry-wide disputes probably reflects the change in incentives associated with the shift to fixed price building contracts, which encourage head contractors to minimise site-specific industrial action. Critall (1997) described how this changed the behaviour of the 10 largest head contractors in Queensland. They decided to negotiate their enterprise agreements collectively because:

> … any industrial action created by the union campaign could be argued contractually as state-wide action … This strategy was cognisant of the particular contractual remedies that enabled the builders to claim additional time due to the industrial disruption and not be contractually exposed to claims that they were directly responsible … (Critall 1997, p. 436)

National statistics on industrial disputes mask significant differences between states. Most notably, the rate of dispute related delays for building and construction in New South Wales was below the national average for that industry in each year from 1994 to 1998 inclusive (table 2.2). Over the same period, the rate of dispute related delays in Victorian building and construction was at least twice as high as that in New South Wales. The lower rate of disputes in New South Wales may reflect the bipartisan support at a political level in that state for the recommendations of the Gyles Royal Commission. The relative magnitude of dispute related delays in Queensland has been volatile. It was well above the national average from 1994 to 1996 but below the national (and New South Wales) average in 1997 and 1998.

Table 2.2 **Rate of dispute related delays in building and construction, by state**

Working days lost per thousand employees

| *State* | *1991* | *1992* | *1993* | *1994* | *1995* | *1996* | *1997* | *1998* |
|---|---|---|---|---|---|---|---|---|
| New South Wales | 438 | 96 | 45 | 1 | 19 | 469 | 269 | 388 |
| Victoria | 292 | 369 | 76 | 30 | 205 | 1 152 | 551 | 764 |
| Queensland | 161 | 17 | 7 | 139 | 200 | 1 440 | 51 | 340 |
| Western Australia | 454 | 53 | 75 | 154 | 180 | 797 | 525 | 1 107 |
| South Australia | 599 | 36 | 0 | 21 | 24 | 660 | 75 | 161 |
| Tasmania | 16 | 31 | 0 | 0 | 0 | 0 | 0 | 7 |
| Australia | 349 | 126 | 41 | 59 | 115 | 892 | 290 | 524 |

*Data sources:* ABS (*Industrial Disputes, Australia*, Cat. no. 6322.0; unpublished data).

Leighton Contractors estimates that the reduction in lost time due to disputes in New South Wales is equivalent to about 15 to 20 per cent of the total time worked on a major project (Leighton Contractors Pty Ltd, Response 37, p. 1). The New South Wales Government estimates that contractors include a contingency for industrial disputes and inclement weather in their tender bids of around 5 per cent in Sydney, compared to well in excess of 10 per cent in Melbourne (Construction Policy Steering Committee, Response 40, p. 2). This is consistent with information provided to the Employment Advocate:

> A reputable source having a relatively significant involvement in building projects in both Victoria and NSW recently revealed to me that to cost work in Victoria required that they allow an additional 22 per cent of days for 'inclement weather/IR'. This compares to 5 per cent for NSW. (Hamberger 1999)

## Costs

Other quantitative evidence on the extent of reform is also mixed because it is difficult to separate the effects of short term responses to the building cycle from

structural changes that raise long term performance. For example, building costs fell during the early 1990s but have increased since non-residential building demand began growing again in 1994-95 (Rawlinsons 1998).

In an international comparison of construction costs, Langston and de Valence (1999) found that a similar high-rise commercial office building would be less expensive to build in Australia than in the United States, Germany and the United Kingdom. However, after adjusting exchange rates for differences in general price levels between countries they found that Australian construction costs are significantly higher than in the other countries examined.

Nevertheless, the New South Wales Government estimates that the extent to which general building costs in Sydney are greater than those in Brisbane has fallen substantially since 1991 (Construction Policy Steering Committee, Response 40, p. 2).

## Productivity

ABS statistics provide few insights into productivity changes on large capital city building projects because total input use is not measured at the sectoral level in building and construction. As noted in chapter 1, the ABS does not measure the division of labour between the residential, non-residential and engineering sectors. There are also problems in determining the use of capital in each sector. Therefore, it is not possible to calculate total factor productivity (output per unit of total inputs) even for the entire non-residential building sector. This is a major deficiency because work arrangements in building and construction vary markedly between sector, region, trade and enterprise size. The Gyles Royal Commission (1992f) recommended changes in data collection to address this problem but unfortunately this was not implemented.

Some studies have ignored the problems with publicly available data by calculating aggregate estimates of partial labour productivity (output per unit of labour). This has led to misleading conclusions. For example, McKinsey and Company (1995) calculated industry-level estimates of value added per hour worked for the period 1980-93. They concluded that the performance of Australian building and construction compared favourably to other developed countries. However, more detailed surveys by Ireland (1988, 1990, 1991) and the Gyles Royal Commission (1992d, 1992e) showed that inefficient work arrangements were common on large non-residential building projects during much of 1980-93 (and compared poorly to other developed countries).

The partial labour productivity measure used by McKinsey and Company (1995) can also be misleading because it ignores how price distortions can lead to inefficient substitution between inputs. For example, if wages are pushed above their competitive level, then employers are likely to reduce their workforce and compensate by using more machinery. This will result in an inefficient allocation of inputs and a sub-optimal level of output.

Research by Access Economics and World Competitive Practices for the Australian Constructors Association indicates that such an inefficient substitution from labour to capital may have occurred. They found that, compared to other developed countries, Australian building and construction has relatively high wages and a low level of employment per head of population (Australian Constructors Association, Response 36, p. 5). Thus, Australian building and construction employers appear to have responded to high wage levels by using fewer workers.

Employers may have compensated for this by using more capital equipment per worker than is efficient. If this is the case, then output per worker (labour productivity) would be high compared to other developed countries (because workers have more capital equipment) but output per unit of total inputs (total factor productivity) would be relatively low, reflecting the inefficient allocation of inputs. Access Economics and World Competitive Practices found that output per worker is relatively high in Australian building and construction. This, combined with their findings on wages and employment, is consistent with an inefficient substitution from labour to capital in Australian building and construction.

## 2.9 Summary

This chapter described the key market characteristics associated with large capital city building projects. In summary, the production process relies on a complex contractual system, involving many separate parties with different, and sometimes competing, interests. Prima facie, this system appears well suited to the underlying economics of the industry. However, it also heightens the vulnerability of large capital city building projects to industrial action. This, combined with blanket union coverage on large capital city building sites, gives unions considerable market power in negotiations over work arrangements. In recognition of this, head contractors typically require their subcontractors to have a union endorsed enterprise agreement and pay their employees what is usually known as a site allowance, which is seen in part as a means of buying industrial peace.

The attitudes of unions and head contractors, as well as the institutional constraints on their behaviour, can therefore have a considerable impact on the efficiency of

large capital city building sites. The experience of the late 1980s demonstrated how substantial inefficiencies can arise when these factors are not conducive to high workplace performance.

Consultations for this study suggest that there has generally been an improvement in the attitudes of unions and head contractors since the late 1980s. This appears to have been due to a variety of factors, including the dislocation caused by the early 1990s recession and, in the case of New South Wales, the initiation of deregistration proceedings against the CFMEU. However, concerns remain about the institutional constraints on union and head contractor behaviour, given that large capital city building projects are still vulnerable to industrial action. The next chapter examines this issue with respect to the negotiation and implementation of agreements on work arrangements.

# 3 Negotiation processes and outcomes

This chapter examines the negotiation processes and outcomes used for work arrangements on large capital city building projects. A complex three layered system of agreements has developed in response to the market characteristics described in chapter 2. A notable feature of this system is the emphasis on collectively negotiated industry and project-wide outcomes. Enterprise agreements that are substantially negotiated within individual firms are less common than in most industries.

## 3.1 Institutional framework

Negotiation processes and outcomes have to conform to a number of regulatory requirements. For large capital city building projects, the most important are:

- federal and state industrial relations legislation and related legislation covering entitlements to paid leave, superannuation, workplace health and safety (WHS), equal employment opportunity and other conditions;
- codes of conduct for government building projects; and
- income tax legislation applying to employees and self-employed workers.

### Industrial relations systems

There are seven industrial relations systems in Australia: the federal system (including the two territories) and six state systems (although Victoria transferred its industrial relations arrangements to the federal jurisdiction in 1996). There have been significant changes in these systems in recent years. Of most importance has been the shift in emphasis from industry-wide awards and agreements to enterprise bargaining.

The current federal industrial relations system is governed by the *Workplace Relations Act 1996* (WRA 1996), which provides three main mechanisms for determining work arrangements:

- Awards, which specify minimum wages and conditions relating to twenty 'allowable matters', for specified industries and occupations;

- Certified Agreements, which are enterprise level agreements for groups of employees at individual businesses, approved and registered by the Australian Industrial Relations Commission (AIRC); and
- Australian Workplace Agreements (AWAs), which are agreements for individual employees, approved and registered by the Office of the Employment Advocate (OEA).

Federal awards are widely used to set minimum standards for employees in building and construction. These are usually supplemented by Certified Agreements that specify actual work arrangements at each enterprise. Few workers on large capital city building projects use AWAs.

Other features of the WRA 1996 that are relevant to non-residential building projects are:

- the simplification of pre-1996 awards to 20 allowable matters and to minimum rather than actual paid rates of remuneration;
- freedom of association (voluntary unionism);
- legal strikes, lock-outs and other industrial action are restricted to declared negotiation periods (protected industrial action); and
- a reduced role for the AIRC in enforcement and dispute resolution, with responsibility for secondary boycotts shifting to the ACCC, enforcement of awards and agreements to the Federal Court, and freedom of association laws enforced by the OEA.

In the state jurisdictions, there are varying degrees of emphasis on the roles of awards and enterprise agreements. Some states currently have employment legislation that mirrors the WRA 1996 (Queensland) or is similar in intent (Western Australia). New South Wales has retained a stronger role for awards in its industrial relations system than has the Commonwealth and other states.

The shift (in varying degrees) in industrial relations systems to greater emphasis on enterprise bargaining is intended to raise productivity and competitiveness by:

- enabling greater differentiation between firms to encourage innovation and enhance their ability to compete for labour;
- allowing enterprises greater flexibility to adjust to changes in their own unique circumstances, and thus utilise their labour resources more productively;
- encouraging the development of a workplace culture of employee participation, cooperation, innovation, multi-skilling and commitment; and

- providing employees with the opportunity to tailor work arrangements to provide better rewards for innovation, multi-skilling and effort and to introduce flexible work practices to complement family and personal interests (BCA 1989; Dabscheck 1992; Deery, Plowman and Walsh 1997).

However, some have argued that the above benefits are limited on large building sites because it is necessary to coordinate work arrangements across many different enterprises (see for example Mussert 1998). As noted in chapter 2, large capital city building projects involve numerous subcontractors working on interdependent tasks at the same location. This has led some to argue that the appropriate bargaining unit is not an individual enterprise but rather the whole workplace (that is, the building site).

In theory, it is possible under the WRA 1996 to follow this model by negotiating a 'multiple-business agreement'. However, it must satisfy a strict registration process by the full bench of the AIRC. The conditions for certification include that the agreement is in the public interest, does not deal with issues more appropriately addressed in a single business agreement, and is not enforceable if it is inconsistent with other (single business) agreements (s170LC). The WRA 1996 would also require that all subcontractors on a large building site were registered as parties to the multiple-business agreement. In practice, this is not feasible because subcontractors are often not selected until the project has commenced.

To the Commission's knowledge, no multiple-business agreements for large capital city building projects have ever been registered with the AIRC. Instead, head contractors use unregistered project or industry agreements to implement uniform work arrangements across subcontractors on a building site (section 3.4).

## Codes of conduct and tax legislation

As noted in chapter 2, government building projects are subject to codes of conduct. This adds another layer of regulation to the legislative and other requirements applying to work arrangements. In practice, these codes reinforce the objectives of each government's industrial relations legislation. For example, the Federal Government's Implementation Guidelines for the National Code of Practice for the Construction Industry require multiple-employer agreements to be subject to the certification process specified by the WRA 1996 (or by State employment legislation where applicable).

The negotiation of work arrangements on large capital city building sites is also influenced by taxation legislation, which makes it financially attractive for building workers to be self-employed rather than employees (see chapter 6). If workers are

self-employed, then they negotiate their work arrangements as a contract for services outside the legislative framework of the WRA 1996 and other employment legislation (such as for superannuation, workers' compensation and long service leave). However, as noted in chapter 2, it appears that most workers on large capital city building sites are employees.

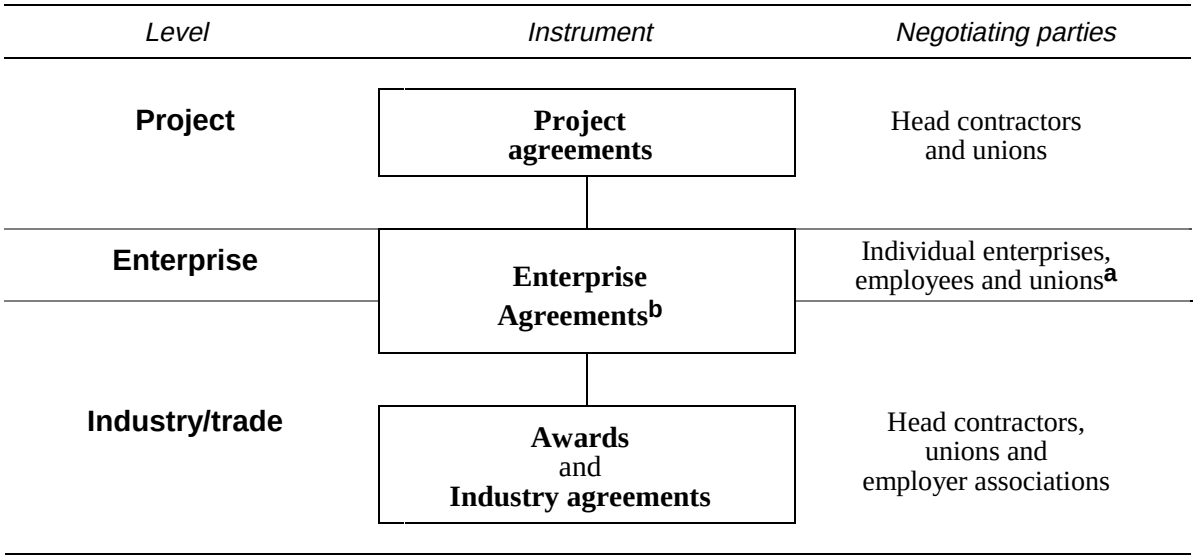
## 3.2 Overview of agreement structure

Work arrangements on large capital city building projects are based on three layers of agreements. Their implementation corresponds to the following three levels:

- project;
- enterprise; and
- industry/trade.

The relationships between these agreements are shown in figure 3.1. They do not operate independently, but interact and constrain one another. In particular, agreements made at the project or industry/trade level reduce the scope for enterprise level negotiations. As a result, enterprise agreements negotiated substantially within an individual firm are relatively unusual among subcontractors.

Figure 3.1 **Levels of negotiation for large capital city building projects**




[a] An employer and its employees control the negotiation process but they may use employer associations and unions to assist their negotiations. [b] Enterprise agreements can be the result of both enterprise and industry/trade level negotiations. The most typical form of enterprise agreements are pattern agreements. Enterprise level negotiations are more likely for non-wage issues.

Head contractors usually require their subcontractors to have an enterprise agreement that adopts work arrangements negotiated at an industry/trade level. This is often based on a 'pattern' agreement negotiated by an employer association and a union (see section 3.3). Nevertheless, there is sometimes scope for firms to negotiate non-wage issues solely at an enterprise level.

A notable feature of the negotiation process for large capital city building projects is the relatively limited direct role for employers and employees. The dominance of project and industry/trade negotiations means that head contractors, the larger employer associations and unions negotiate most work arrangements. Employer associations notionally represent subcontractors in the negotiation of industry/trade level agreements. However, it is unclear what proportion of employers are members of these associations and whether their diverse interests can be adequately represented by a single entity (see section 3.3). For project agreements, negotiations take place between a head contractor and unions, with no direct role for subcontractors or their employer associations. At all levels of negotiation, unions represent employees.

It is common for agreements at each of the three levels to cover similar issues (see table 3.1). This overlap reinforces the interdependence between the three types of agreements used to specify work arrangements on large capital city building projects. Some work arrangements, such as WHS, superannuation and long service leave, are also covered by general and industry-wide legislation.

## 3.3 Industry/trade level negotiations

Industry/trade level negotiations are characterised by a high level of collective representation for both employees and employers. Traditionally, industry-wide negotiations have been used to develop general employment conditions while trade level negotiations set work arrangements relevant to particular trades. Each employer association negotiates work arrangements with the relevant union on behalf of its members. This is normally conducted as a separate process in each state. Minimum conditions of employment are documented as industry and trades awards. Actual conditions are specified in industry agreements and pattern agreements.

In theory, industry/trade level negotiations can be an efficient way to set basic employment standards with minimum immediate transaction costs for individual firms and employees. Fewer, but larger parties are involved and those parties may be more evenly matched in their bargaining power. Under the WRA 1996, this process

still plays a formal role in setting minimum employment conditions through the award system.

Table 3.1 **Examples of overlap between different types of agreements**

| | *Work arrangement covered in:* | | | |
|---|---|---|---|---|
| | *Awards*[a] | *Industry agreements*[b] | *Pattern agreements*[c] | *Project agreements*[d] |
| **Workplace consultation** | | | | |
| Consultation | ✓ | | ✓ | ✓ |
| Dispute resolution | ✓ | ✓ | ✓ | ✓ |
| **Health and safety** | | | | |
| Safety procedures | | ✓ | ✓ | ✓ |
| Union safety inspections | ✓ | ✓ | | ✓ |
| Inclement weather procedures | ✓ | ✓ | ✓ | ✓ |
| Amenities | ✓ | ✓ | ✓ | ✓ |
| **Hours and employment** | | | | |
| Span of hours | ✓ | | ✓ | ✓ |
| Hours worked | ✓ | | ✓ | ✓ |
| RDOs | ✓ | ✓ | ✓ | ✓ |
| Recruitment and termination | ✓ | | ✓ | |
| **Remuneration** | | | | |
| Base wage rates | ✓ | | ✓ | |
| Site allowances | | ✓ | ✓ | ✓ |
| **On-costs** | | | | |
| Redundancy | ✓ | ✓ | ✓ | ✓ |
| Long service leave | | ✓ | | ✓ |
| Superannuation | ✓ | ✓ | ✓ | ✓ |

[a] Based on the *National Building and Construction Industry Award 1990*. [b] Based on the Victorian Building Industry Agreement. [c] Based on New South Wales plumbing and electrical trades pattern agreements. [d] Based on a sample of project agreements for building sites visited for this study.

Some parties in the building and construction industry have argued in favour of industry/trade level negotiations for actual employment conditions due to the predominance of small firms in building and construction and their lack of bargaining power relative to unions (see for example Mussert 1998). Particularly for smaller subcontractors, there is a strong perception that their bargaining outcomes can be better if negotiated collectively.

Some building and construction employers and their representative associations view industry/trade level negotiations as a way to avoid competing for workers and projects on the basis of labour costs. For example, the National Electrical and Communications Association (NECA) described the trade-negotiated 'pattern

agreements' common to building and construction as 'a necessary evil to encourage a level playing field when tendering on major projects' (NECA, Response 38, p. 1).

Industry/trade level negotiations are also seen by some firms as a way to minimise disputes by limiting the scope for dissatisfaction among employees about their wages and conditions relative to other workers. For example, one electrical contractor employing around 500 people Australia-wide wrote:

> We prefer an industry pattern agreement where our opposition is paying the same rates. ... A building site is not an enterprise. Pattern agreements ensure employees working side by side on the job for different employers receive the same rates of pay. Employees on different rates of pay are never happy. (Ralph M. Lee Pty Ltd, Response 5, pp. 4-5).

Within the membership of associations conducting industry/trade level negotiations, larger employers tend to have more influence in negotiation processes than smaller members. However, even larger firms can find it difficult to have their particular needs and interests addressed through collective negotiation. Several larger subcontractors consulted for this study said that they had no real influence on the outcomes of negotiations by their employer association. Some of these firms claimed they had good relations with their employees and thought they could achieve better outcomes if they were less restricted in their own enterprise-level negotiations by industry/trade agreements. This raises concerns about how representative employer associations can be of the diverse interests of employers in industry/trade level negotiations.

For smaller firms, industry/trade level negotiations do not promote flexibility at the enterprise level. This was illustrated by the shift away from industry level negotiations by the Master Builders' Association of Western Australia (MBA WA) in the early 1990s. Its smaller members were disappointed with the lack of identifiable productivity benefits from industry/trade level negotiations and the lack of flexibility in applying the outcomes to their own businesses. The MBA WA now promotes enterprise (and some trade) level negotiations for its members (MBA WA, Response 4, p. 2). Some electrical and plumbing subcontractors in Brisbane are also moving away from pattern bargaining, with the support of their employer associations.

## Outcomes

The outcomes of industry/trade negotiations have traditionally been documented as awards. In some cases they have also taken the form of industry agreements. The most significant industry agreement is the (unregistered) Victorian Building Industry Agreement (VBIA), which applies to most large non-residential building projects in

Melbourne. More recently, pattern agreements have been used to supplement awards.

### *Awards*

As noted in section 3.1, all federal awards may now prescribe only minimum employment conditions rather than actual conditions for 20 'allowable matters' (WRA 1996, s. 89A). The main federal award for general construction workers is the *National Building and Construction Industry Award 1990* (NBCIA 1990), which applies in most States and Territories and covers workers across a range of construction occupations, excepting the licensed trades. The NBCIA 1990 is currently in the process of being simplified, as required by the WRA 1996. Following extended hearings, the AIRC handed down a decision on 23 July 1999, which finalised allowability of most, though not all, clauses and provisions of the NBCIA 1990.

Table 3.2 **Key building and construction awards**

| *Award Title* | *Jurisdiction* | *Parties* | *Occupations* |
|---|---|---|---|
| *National Building and Construction Industry Award 1990* | Federal | CFMEU<br>AWU<br>MBA | Labouring<br>Formwork<br>Joinery |
| *National Electrical, Electronic and Communications Contracting Industry Award 1998* | Federal | CEPU<br>NECA | Electrical |
| *Plumbing Industry (Queensland and WA) Award 1999* | Federal | CEPU<br>MPA | Plumbing |
| *Plumbing Industry (NSW) Award 1999* | Federal | CEPU<br>MPA | Plumbing |
| *Plumbing Trades (Southern States) Construction Agreement 1999* | Federal | CEPU<br>MPA | Plumbing |
| *Electrical Contracting Industry (State) Consolidated Award* | NSW | CEPU<br>NECA | Electrical |
| *Building Tradesmen's (Other than Plumbers) and Builders' Labourers' Construction Award (State) 1993* | Queensland | CFMEU<br>MBA | Labouring<br>Formwork<br>All trades other than plumbing and electrical. |
| *Electrical Contracting Industry Award (State)* | Queensland | CEPU<br>ECAQ | Electrical |

Licensed trades have their own state and federal awards (see table 3.2). Some trades awards in the federal jurisdiction, such as those for plumbers, are applicable in only one or two states. These awards are also in the process of being simplified under the WRA 1996 or have recently been simplified.

DEWRSB estimates that federal awards (and agreements based on federal awards) cover 55 per cent of building and construction employees. This includes all building and construction employees in Victoria, the ACT and Northern Territory, and federal award and agreement employees in other states (DEWRSB, Response 30, p. 3). State awards (and agreements based on those awards) cover the remaining 45 per cent of employees.

### *Industry agreements*

The most influential industry agreement is the Victorian Building Industry Agreement (VBIA). The current version of the VBIA is operative until 31 March 2000 and is signed by most employer associations and all unions except those representing electricians. Electricians have instead developed a pattern agreement that is consistent with the VBIA and is identical in its main clauses. As well, some head contractors have chosen not to be a party to the VBIA.

The VBIA effectively applies on all Victorian construction sites using the NBCIA 1990, the *Plumbing Trades (Southern States) Construction Agreement 1999* or the *Sprinkler Pipe Fitters Award 1975*, excluding civil engineering and housing. It specifies site allowances, rostered days off (RDOs), site inductions, inclement weather procedures, dispute resolution procedures and many other arrangements which, in other states, tend to be specified in project agreements and pattern agreements.

In New South Wales, there has not been an industry agreement equivalent to the VBIA since the Gyles Royal Commission in the early 1990s (Construction Policy Steering Committee, Response 40, p. 5). However, a Memorandum of Understanding on the Olympic Construction Program (MOU) does apply to the many Olympics building projects under construction in and around Sydney. This was negotiated between the New South Wales Government and the New South Wales Labor Council (on behalf of unions). It is a short document with little detail about work arrangements. It provides the 'first tier' of the employment framework for its signatories and commits them to complying with the NSW Government Code of Practice. The 'second tier' specifies actual work arrangements and consists of:

> agreements that are reached on a project by project basis between employers, the Labor Council of NSW, unions and employees. (Construction Policy Steering Committee, Response 40, p. 5)

In Queensland, the MBA and Builders' Labourers' Federation have developed a Statement of Intent (QSOI). This operates more like a pattern agreement than an industry agreement because it is implemented through registered enterprise

agreements. Head contractors who are signatory to the QSOI apply it to their own workforce and require their subcontractors to follow its provisions:

> general contractors ... will use their best endeavours to direct that the terms and conditions set out in the Statement will apply to members of the unions who are employed by subcontractors subject to contracts to which the above mentioned contractors are party in the State of Queensland. (QSOI, c. 2.1)

The QSOI, unlike the VBIA and the Olympics MOU, specifies actual wage rates. Other arrangements specified include wage increases for 1996–99, site allowances, notice procedures for changing RDOs, daily span of hours, maximum work hours, union membership and superannuation.

### *Pattern agreements*

As noted in section 3.1, all federal awards may now specify only minimum pay and conditions. However, this has not significantly reduced the use of industry/trade level negotiations for large capital city building projects. Rather, the actual outcomes of industry/trade level negotiations have increasingly been documented through a process known as 'pattern bargaining'.

Pattern bargaining occurs when common work arrangements in enterprise agreements are negotiated across one or more sections of an industry. It can range from very prescriptive forms to approaches that enable greater diversity between enterprises. In the case of large capital city building projects, the outcome of pattern bargaining is usually documented as a pattern agreement. This can take the form of either a framework agreement or a pro-forma agreement. A framework agreement is negotiated between an employer association and a union to establish uniform wage rates across firms and provides broad guidelines for enterprise level negotiations on non-wage issues. A pro-forma agreement is usually written by a union and presented to subcontractors for signing with little modification (ACIRRT 1998).

Examples of pattern agreements are given in table 3.3. In most states, the licensed trades (electricians and plumbers) have developed their own pattern agreements. Other trades tend to use a general pattern agreement in Victoria (the industry workplace bargaining 'model agreement'). In New South Wales, there are various 'sectoral' agreements for the different non-licensed trades.

In the case of electrical contractors, NECA is not a party to the union-endorsed New South Wales pattern agreement, which is used widely on larger Sydney building sites. Nationally, NECA stated that it:

> is supportive of members who wish to enter into a pattern agreement but also will support any member who wishes to enter either a union or non-union enterprise based

agreement … different types of agreements suit the purposes of different subcontractors [and] no employer should be forced into being a party to a union based pattern agreement if neither they nor their employees wish to be involved. (NECA, Response 38, p. 1)

Table 3.3 **Examples of pattern agreements**

| | *Negotiating parties* | *Signatories* | *Jurisdiction* |
|---|---|---|---|
| ***New South Wales*** | | | |
| NSW plumbing pattern agreement | CEPU<br>MPA | CEPU<br>Subcontractors | Federal |
| NSW electrical trades pattern agreement | ETU<br>NECA | ETU<br>Subcontractors | Federal |
| ***Victoria*** | | | |
| Victorian plumbing pattern agreement | CEPU<br>MPA | CEPU<br>Subcontractors | Federal |
| Victorian building construction industry workplace bargaining statement of settlement (with model agreement) | CFMEU<br>MBA | CFMEU<br>Subcontractors | Federal |
| Victorian electrical trades pattern agreement | ETU<br>NECA | ETU<br>Subcontractors | Federal |
| ***Queensland*** | | | |
| Painters agreement | BLF<br>MPDA | BLF<br>Subcontractors | Queensland |
| Queensland Statement of Intent | BLF<br>MBA | BLF<br>Head contractors<br>Subcontractors | Federal or Queensland |

Pattern agreements can be used to either maintain the status quo or to introduce uniform workplace change. In building and construction, as in some other industries, first generation agreements tended to copy the award previously in use, thereby enshrining the old award employment conditions in the newly registered agreements (and insulating workers from award simplification). Later pattern agreements tended to enable more flexibility in work arrangements. For example, a 1997 pattern agreement in Victoria gave a 17 per cent wage increase over three years in exchange for changed inclement weather relocation and allowance provisions and rolling-in of a number of other allowances (ACIRRT 1997).

DWRSB (1998c) estimated that, in 1998, 43 per cent of building and construction employees were covered by either a federal or state registered enterprise agreement. It is difficult to determine exactly what proportion are based on pattern agreements. However, DWRSB (1998b) found that the distribution of wage increases in federally registered enterprise agreements for building and construction is much

narrower than for other industries. It found that the vast majority of employees covered by federally registered enterprise agreements in building and construction received annual wage increases of 4.7 per cent, which DWRSB believed to be consistent with pattern agreements negotiated by the CFMEU and CEPU. DWRSB (1998b) estimated that up to 40 per cent of all building and construction employees in New South Wales are covered by pattern agreements. Based on the workplace level information collected for this study, it appears that pattern agreements cover most employees on large capital city building projects.

In mid 1998, almost half of all federally registered enterprise agreements in building and construction were for businesses with less than 10 employees (table 3.4). The parent awards to these enterprise agreements indicate that the sectors of building and construction most likely to use federal enterprise agreements are general construction, electrical and plumbing trades. Other parent awards for enterprise agreements cover sprinkler pipe fitters, metals engineers and mobile crane drivers.

Table 3.4 **Federal Certified Agreements in building and construction**
Agreements current at 30 June 1998

| | *Number* | *Per cent* |
|---|---|---|
| **By number of employees** | | |
| 1 to 5 | 542 | 27 |
| 6 to 9 | 374 | 19 |
| 10 to 49 | 970 | 48 |
| 50 to 99 | 83 | 4 |
| 100 or more | 32 | 2 |
| **By top 5 parent awards** | | |
| *Electrical Contracting Industry Award 1992* | 520 | 26 |
| *National Building and Construction Industry Award 1990* | 415 | 21 |
| *Plumbing Industry (Queensland and WA) Award 1979* | 342 | 17 |
| *Plumbing Industry (NSW) Award 1983* | 334 | 17 |
| *Plumbing Industry (ACT) Award 1982* | 333 | 17 |
| **Total Certified Agreements** | **2 002** | **100** |

*Source:* Workplace Agreements Database.

The average duration of these enterprise agreements was 2.1 years and the average annual wage increase was 5.1 per cent (ranging from annual increases of 1 per cent up to 15 per cent). A 'non-quantifiable wage adjustment' occurred in 35 per cent of agreements, such as changes to the wage structure or to overtime rates. In addition, 15 per cent included a wage increase that was unclear or unspecified. Less than one per cent had conditions attached to achieving the specified wage increases, such as performance targets.

Further information on enterprise agreements is provided in the Agreements Database and Monitor (ADAM) maintained by ACIRRT at the University of Sydney. The ADAM includes Federal, NSW, Queensland and West Australian registered agreements. Compared to other industries, ACIRRT (1997) found that building and construction enterprise agreements sampled in the March quarter 1997:

- were less likely to comprehensively replace their parent award (4.5 per cent compared with 9.0 per cent for all industries);
- had the highest average annual wage increase, at 7.4 per cent (compared with 5.4 per cent for all industries);
- were more likely to include unions as a party to the agreement (84.5 per cent compared with 75.7 per cent for all industries);
- were more likely to contain 'employee oriented' clauses providing for training, WHS, teamwork, use of contractors, consultation and grievance procedures;
- were less likely to include employer discretion to alter work hours or to allow for multi-skilling; and
- were less likely to include annualised wages or quantified productivity targets.

## Performance effects

Where work arrangements are most effectively addressed at an industry/trade level, then the use of awards and industry agreements may be appropriate. This is most likely to be the case for specifying minimum standards, such as for safety procedures and minimum remuneration. In the case of WHS, superannuation and certain leave entitlements, minimum requirements are also specified in separate state and federal legislation.

Industry/trade level negotiations over actual rather than minimum conditions (that is, industry and pattern agreements) restrict the ability of firms to negotiate their own work arrangements. This reduced flexibility limits the ability of firms to compete for employees or projects on the basis of different work arrangements. It may also reduce the capacity for firms to respond efficiently to changes in their competitive environment. Furthermore, where wage increases are negotiated at an industry/trade level without corresponding productivity improvements, unit labour costs will increase.

## 3.4 Project level negotiations

Negotiations at the project level are built on the premise that multi-employer building projects are a single workplace and that certain work arrangements should be negotiated for the whole building site rather than for individual enterprises. The structural model being followed here is a single employer, single site enterprise like that found in most industries (and assumed in the WRA 1996).

The emphasis in project level negotiations is on uniformity of work arrangements across the building site, irrespective of which enterprise actually employs the labour. In practice, this gives the head contractor a central role in setting work arrangements for all employees on site. Project agreements are negotiated directly between the head contractor and unions, often prior to the commencement of building. Subcontractors, who employ most workers, do not have a role in the negotiation process for project agreements. Instead, compliance with the outcome is made a condition of their contract with the head contractor.

### Outcomes

Project agreements appear to be used on most large capital city building projects in Sydney and Brisbane. In Melbourne, the VBIA usually assumes this role. However, in recent years there has been an emerging trend to use project agreements on large high profile projects in Melbourne. Project agreements typically contain provisions on site allowances, RDOs, work hours and WHS requirements. However, they are not usually detailed documents, as they cover many work arrangements that are specified in detail in awards and pattern agreements.

Most project agreements are unregistered, reflecting the difficulty in registering federal multiple-employer agreements. Unregistered agreements between employers and employees are allowed under the WRA 1996 but may not replace or override any award or formal agreement and operate in addition to formal awards or agreements already in place (DWRSB 1998a).

### Performance effects

Most of the financial benefits of project agreements appear to be captured by head contractors, unions and their members. In contrast, the associated financial costs are largely borne by subcontractors (and, in the longer run, are probably passed on to clients).

For head contractors, the single most important function of project level negotiations appears to be to minimise the risk of time lost and, in particular, industrial disputes. As noted in chapter 2, head contractors face large financial penalties for delays caused by site-specific industrial action. These penalties can account for a large proportion of a head contractor's profit on a project. In contrast, changes in the cost of employing construction workers have little impact on head contractor profits because subcontractors employ most workers on large capital city building sites. This puts unions in a strong bargaining position relative to the head contractor, such that increased allowances and other employment benefits can be negotiated in return for guarantees of industrial peace.

An additional incentive for head contractors to control work arrangements on their projects is that, in some circumstances, they are expected to pay the entitlements of subcontractor employees. In New South Wales, head contractors can be held legally responsible if payments to subcontractor employees do not meet relevant award and agreement provisions (DEWRSB, Response 39, p. 6). For this reason, head contractors do not remit a subcontractor's account until its remuneration payments have been audited to ensure that the subcontractor's employees have received all their entitlements. A similar arrangement applies in Victoria and Queensland, largely as a result of custom and practice. In Victoria, the responsibility of head contractors with respect to the entitlements of subcontractor employees is specified in the VBIA.

Head contractors argue that project agreements are also a useful management tool. They document site specific work arrangements, such as work hours, RDOs, and procedures for inclement weather and other aspects of workplace safety. This can be vital because the head contractor is legally responsible for safety standards. Documenting site specific work arrangements for all subcontractors in a project agreement ensures that everyone on site is informed of their rights and responsibilities. Head contractors may also find project agreements useful in meeting their legal responsibilities to ensure that legislated employment conditions are met for all workers.

An alternative view is that the head contractor's role is to engage and coordinate subcontracted firms on site, not to negotiate work arrangements for each subcontractor's employees. Through contracts with its subcontractors, the head contractor already controls the site's timetables, design, planning and coordination. Work arrangements associated with remuneration should therefore be delegated to subcontractors. Their contracts detail all work specifications and timetables and are reinforced with penalties for any breaches.

For subcontractors, unregistered project agreements can take precedence over registered enterprise agreements, which contravenes the WRA 1996. Project agreements typically increase a subcontractor's costs by requiring increased payments to its employees. They also reduce the flexibility of other work arrangements by requiring the use of a union endorsed enterprise agreement. An additional problem arises for larger subcontractors that have employees working on a number of sites simultaneously with different pay and conditions applying at each site. That is, a project agreement may produce uniformity across a site but at the same time result in pay differences within subcontracting firms.

## 3.5 Enterprise level negotiations

As noted in section 3.2, enterprise agreements that are substantially negotiated within a single firm are less common in building and construction than in other industries. This is particularly the case for remuneration (see chapter 6). There appears to be greater scope for enterprise level negotiation on non-wage issues.

Where enterprise level negotiations have occurred, they have been more common among head contractors than among subcontractors. Their experiences of enterprise bargaining have been mixed. Some subcontractors said that the expected flexibility and productivity gains had not materialised, largely due to unequal bargaining power or inexperience in negotiating. For example:

> A genuine Enterprise Bargaining Agreement (EBA) trade-off of pay and conditions for productivity has not been something we have achieved. EBA negotiations for us have been almost solely a case of trying to minimise the union's industry-wide standard of pay increase. (Ralph M. Lee Pty Ltd, Response 5, p. 4).

For small firms, a related consideration is the perceived time and effort required for genuine enterprise bargaining, although this must be balanced against any potential productivity gains and can be expected to diminish over time as both sides gain experience of the process:

> Enterprise agreements might be a good idea but the concept of entering into the immense amount of work required to create one with our workers is beyond our business' capacity. (Green Eden Watering Systems Pty Ltd, Response 2, p. 2)

Among larger subcontractors and head contractors in non-residential construction, some of those consulted had achieved benefits from enterprise-level negotiations. However, others were still dissatisfied with the results to date. It was generally recognised that achieving workplace change through this route is an incremental process.

## Performance effects

As noted in section 3.2, it is difficult to have genuine enterprise negotiations on a particular work arrangement in the presence of project and industry/trade agreements. Broadly, the alternatives are either uniformity within a firm (enterprise agreements) or uniform work arrangements across building sites (project and industry/trade agreements). The latter has tended to prevail on large capital city building projects.

Where genuine enterprise agreements exist, subcontractor employees tend to have the same work arrangements across different building sites. Hence, employees of different subcontractors working on the same site would have different work arrangements. This would be more appropriate for issues such as ordinary hours, overtime, actual pay rates, performance assessments, bonuses and internal dispute resolution procedures.

If all work arrangements were negotiated through genuine enterprise bargaining then head contractors would lose a degree of control over building sites. If the work arrangements negotiated individually by subcontractors differ significantly, this could cause problems for the coordination and planning of work. For example, if different RDO arrangements or inclement weather arrangements were in force across a site, then this could make planning work tasks for these days more complex. On the other hand, industry/trade level agreements lead to reduced flexibility at an enterprise level and therefore possibly lower productivity.

# 4 Workplace communication, training and safety

This chapter examines workplace communication, training and safety arrangements in the commercial building sector. Effective and appropriate workplace management, communication, training and a safe work environment are essential to the efficient operation of large construction sites.

Workplace management styles have traditionally been adversarial on construction sites but appear to have improved in recent years. On many large sites, there is better attention to formal consultation and communication processes and a more professional approach to project management.

Most workers in building and construction are tradespersons and labourers. Although the industry has a high proportion of vocational education and training (VET) qualifications, it has relatively few higher qualified workers and lower English literacy and numeracy skills than the Australian workforce in general. Many parties in building and construction are concerned about future skill levels, and in particular, the potential consequences of declining numbers of apprentices. The wider use of group training schemes and the move to competency based skill formation have been two responses to this concern. The pressure for specialised and further training for employees appears to be increasing, but currently seems limited mainly to site based training inductions. Increasingly, head contractors are placing importance on providing management training to employees in key site positions.

The high incidence of fatalities and injuries compared to other industries makes workplace health and safety (WHS) of particular importance in building and construction. While accident rates have fallen during the 1990s, they remain higher than the all industry average. This is reflected in high workers' compensation premiums. The employment structure of large capital city building sites may have implications for who bears the responsibility and costs of safety. Subcontractors employ the majority of workers who are likely to incur fatality or injury, while head contractors have overall responsibility for site operation and coordination.

## 4.1 Workplace communication

Timely, clear communications — both between companies and within them — are one of the main features that characterise a well-managed, efficient site. At all levels, management and communication styles will reflect the prevailing workplace culture and personal relationships on site. These aspects of work are not directly specified in formal awards, project or enterprise agreements, but rather, arise from personal and corporate work organisation, culture and attitudes.

### Workplace management responsibilities

The typical management hierarchy of a large capital building site broadly follows the contractual structure of the project (see chapter 2, figure 2.1). Head contractors employ both the project and site managers. The project manager (in conjunction with head office management) develops tender specifications, selects subcontractors and negotiates subsequent contract variations. The site manager holds day to day responsibility for coordinating the many stages of work and subcontracted companies on site. Project and site managers work closely together and on some smaller sites their roles may be merged:

> Effective management is the key to success or otherwise on a project. The scope of management activities is ever increasing ... Project management requires a mix of technical competence, business acumen and communication skill. The latter being the most important in dealing successfully with workforce issues. (Concrete Constructions Group Ltd, Response 21, p. 2)

The site managers' responsibilities include:

- site access, security, safety, cleanliness and amenities;
- delivery and transport of materials around the site and removal of waste materials (except where these have been included in subcontractors' duties); and
- scheduling and coordinating work tasks, materials, deadlines, quality control, progress payments and final contract payments for subcontractors.

The site manager normally has direct responsibility for a small group of key employees — the safety officer, crane and hoist operators, clean up and security staff (although sometimes these latter tasks are subcontracted). Some head contractors also directly employ and manage excavation and formwork employees but in general, these stages of construction are managed on a subcontract basis, as are trades and other specialist tasks.

Of the central management tasks, materials transportation is often cited as the single most important element of efficient site management, as delivery delays can quickly bring work to a stop:

> Subcontractors rely very heavily on the builder to be able to plan and manage the project ... Delays because of the lack of materials or coordination is critical in the ability of all trades to work to the best of their potential. If a problem arises it will often be a lack of management on behalf of the builder or poor communication between the builder and respective subcontractors (sic). (MPMSA WA, Response 26, p. 5)

In industry consultations, project design and schedule variations were also identified as requiring particularly careful management. Design variations must be worked through carefully with each affected subcontractor to ensure new job specifications are understood and followed and to negotiate any consequent variations to contract prices, materials or schedules.

Head contractor managers are not generally involved in the day to day management and supervision of subcontractors' employees. This is done by the subcontractors' own supervisors or foremen, who are often senior tradesmen with technical rather than management skills and training. In these firms, employees often work in teams:

> Within the trade contracting companies the management style has to be more consultative and problem solving. After all, they actually have to do the construction work. Management is often team based. (MPA, Response 27, p. 4)

On some projects, site managers may need to be more directly involved in determining subcontracted work teams' start and finish times or meal breaks so that access to lifts and amenities is organised efficiently (see chapter 5). It is also common for the head contractor to require (as a condition of progress payments) verification that subcontractors have paid their employees' superannuation, long service leave, workers' compensation and redundancy fund contributions. This is because, in some circumstances, the head contractor can be held liable for subcontractors' unfulfilled financial obligations to employees (for example, where a subcontractor goes bankrupt while engaged on site. See chapter 6).

Given the diversity of employers operating on each site, management styles and skills vary significantly and there is not always a 'uniform culture' identifiable within each workplace. Some interested parties consulted for this study claimed that there has been a general improvement in management skills in the industry since the late 1980s, particularly at head contractor level. For example, some head contractor firms now run their own project management training programs (see 4.2 below) or seek out managers with a background in project management rather than the more traditional route from engineering. Other head contractors (and subcontractors) spoke of management and administrative efficiency benefits gained from developing long-term, team-like relationships with preferred subcontractors.

However, some subcontractors claimed that site management (that is, head contractor management) remains very hierarchical. These subcontractors described their head contractors' site management style as reflecting the 'dog-eat-dog' competitive culture of the industry and as 'adversarial', 'rough' and 'autocratic' (Green Eden Watering Systems Pty Ltd, Response 2, p. 3; Ralph M. Lee Pty Ltd, Response 5, p. 6). Similarly, a Queensland association reported that despite some observed changes,

> big stick and commercial bullying tactics are the methods deployed by main contractors to manage subcontractors on large building sites. (Civil Contractors Federation (Queensland), Response 10, p. 3)

The Master Painters Australia described head contractor management of subcontractors as 'generally characterised as authoritarian, intimidatory and non-consultative' (MPA, Response 27, p. 4). While the head contractor's management team clearly need to maintain control of site access, materials, scheduling and the like, such inflexible management attitudes are unlikely to be the most effective way to manage and coordinate the huge variety of workers and companies found on large construction sites.

## Workplace communication and consultation

As with management styles, communication processes vary significantly across companies and sites. Communication channels are stronger, but often less formal, where there is an established relationship between the companies and individuals working on site.

A number of formal communication mechanisms can be used on site to aid coordination and execution of work tasks. On the large construction sites visited for this study, some or all of the following forms of communication were used:

- site notice boards, for workplace information such as rostered day off timetables, major deadline dates, safety procedures and other reminders. These were often prominently located near site entrances and/or meal areas and amenities;
- display areas for design and engineering plans and variations, usually located in the site manager's office area and open to perusal by all workers on site;
- individual 'pigeon holes' for distributing mail, plans and information to subcontractors on site (usually located in site manager's office area);
- site coordination and planning meetings (usually weekly or more often) attended by site and project managers and subcontractors' supervisors and managers, to discuss work deadlines, schedules, variations and any potential problems;
- site safety committees for meetings and site inspections (see section 4.3); and

- ad hoc site meetings to address particular issues such as major design, scheduling or materials variations, quality problems, inclement weather or other issues.

The regular site committee meetings for planning and coordination are usually the primary mechanism for direct communication and consultation between the many firms operating on site. Membership and attendance at these meetings is often specified in project agreements (where they are used) or in work contracts.

Within subcontractor firms, less formal communication and consultation mechanisms are often used. Employees often work in teams alongside their supervisor or foreman. Regular, formal meetings tend to be used for design discussions, WHS or other training issues, while 'toolbox' meetings tend to be held on an ad hoc basis as needed to discuss work tasks, rosters and similar day to day issues. Many larger firms also have a consultative committee of management, union and employee representatives to discuss the terms and application of their enterprise agreement. These committees are normally specified in the enterprise agreement and are a separate, more formal, process compared to everyday workplace communication.

Anecdotal information suggests that informal communication occurs frequently between teams working for different subcontractors to discuss immediate work tasks and conditions. There is also regular, informal communication between subcontractor employees, site managers and safety officers as part of the daily inspections, coordination and quality control tasks on site.

## Dispute resolution procedures

Days lost due to industrial disputes in building and construction declined considerably during the early 1990s recession but have since risen again. There also appear to be differences between states, with the incidence of dispute related delays being higher in Victoria (see chapter 2).

Disputes can be grouped into two broad categories — site-specific and industry-wide. Site-specific disputes arise from issues internal to a particular workplace which are typically covered in an enterprise agreement, such as hours of work, pay rates or work tasks. Industry-wide disputes are linked to issues which affect more than one building site. Examples of industry-wide disputes include stoppages during the negotiation of pattern and industry agreements, and protests against award simplification and the taxation of travel allowances.

This distinction between site-specific and industry-wide disputes is important not only for determining appropriate resolution procedures and responses, but also for determining the effect any industrial action arising from the dispute will have on the various parties on site. In particular, in most fixed priced construction contracts, costs and delays due to industry-wide industrial action can trigger a variation in contractual obligations (chapter 2). The cost is then borne by the client through time extensions rather than by the head contractor or subcontractor through liquidated damages claims. In the case of site-specific disputes, the cost of any lost time is borne by the head contractor and/or subcontractors (and paid, for example, through increased overtime to make up for the lost time).

Under current legislation, an important factor in determining appropriate resolution and remedies for industrial action is whether it is 'protected action' or not. Where a dispute occurs during the notified bargaining period of a federal enterprise agreement (including registered trade pattern agreements), industrial action related directly to the negotiation process is 'protected' from AIRC orders, court injunctions and common law remedies (WRA 1996, s. 170ML).

Industrial action during the bargaining period which is not related to the negotiation process, and any action occurring outside the bargaining period (including secondary boycotts and political protest action), is not protected from legal action. Injunctions and other actions can be costly and can have an adverse impact on future workplace relations and culture.

### *Site-specific dispute resolution*

All federal enterprise agreements must include resolution procedures for disputes arising during the life of an agreement (WRA 1996, s. 170LT(8)). In the first instance, the employee(s) with a complaint would consult their supervisor. If the problem cannot be resolved directly between them, then their employer, union delegate and the (head contractor's) site manager may become involved:

> subcontractor managers are very close to their workers and are usually able to resolve disputes fairly easily. However, unions will step in and take ownership of any problem then threaten the main contractor. (Civil Contractors Federation (Queensland), Response 10, p. 3)

The process then moves through a series of standard, hierarchical steps as specified in the relevant agreement. The main difference between formal procedures in building and construction compared to other industries is the earlier involvement of representative associations (unions and employer groups) and other third parties (head contractors). Another difference is that, as well as enterprise agreements, the process may also be specified in industry or project agreements. For example, the

MPA-CEPU 1996–99 trade pattern agreement for Victoria directs signatories to follow the procedures of any 'state or site agreement' to which they are party, such as the VBIA (c. 8 and App. 2, c. 13). The VBIA sets up the following steps, which are to be followed 'as quickly as possible' and 'without ceasing work', except in the case of 'serious' breaches and alleged WHS breaches (c. 18.3):

1. Job Steward and/or union organiser to discuss the dispute with the employer and the head contractor (if the employer is not also the head contractor);
2. If 1. fails, the union organiser will notify their state secretary and the employer will notify their employer association of the dispute. These representatives will organise a conference to discuss the dispute as soon as possible; and
3. If 2. fails, the dispute can be referred to the Victorian Building Industry Disputes Board (VBIDB), which takes into account any stoppages or bans affecting work during the dispute in ordering actions or payments (VBIA, 18.1-18.2).

The VBIDB is an industry-funded body set up under the terms of the VBIA. It is available to mediate and assist with disagreements and disputes on sites where the VBIA applies. Currently, most but not all Victorian head contractors are party to the VBIA, as are all unions excepting the ETU (see chapter 3). The VBIDB can mediate on site or at its own premises on request from one or more parties (usually head contractor management or unions and, less frequently, subcontractors). Where work has already ceased, the VBIDB may order a return to work and may disallow payment of wages for lost work time.

The nature of site-specific disputes dealt with by the VBIDB has changed over the last decade. Virtually gone are the once-common overtime bans and 'homers' (short-notice one day stoppages) due to bomb scares, falling objects, demarcation and 'no-ticket-no-start'. Anecdotal evidence indicates decreases in the incidence of paid lost time during disputes; in the average length of disputes; in the number of workers likely to be affected (due to the demise of one-out-all-out actions); and in the number of disagreements which escalate into industrial action on Victorian sites.

In other states there is no equivalent to the VBIDB (and no industry agreement equivalent to the VBIA). Nevertheless, similar resolution procedures are set out in most pattern or project agreements, with unresolved disputes to be referred to State or Federal Industrial Relations Commissions (for example, the NECA-ETU NSW Agreement, 1998–99, c. 11; Queensland Painters Agreement, 1996–99, c. 1.10). Separate resolution procedures are usually specified for disputes arising from WHS or inclement weather practices (see section 4.3).

Timely dispute resolution requires goodwill and common sense from all parties. Effective management practices and work relationships are required at both head

contractor and subcontractor level to minimise disruption and hostility. As identified by one major contractor:

> Management style and open communication are the keys to minimising workplace disputes. (John Holland Construction & Engineering Pty Ltd, Response 8, p. 2).

In reality, disputes on particular building site often arise in the context of negotiating the terms of a new enterprise or trade pattern agreement. These disputes — for example, over hours of work, pay rates or other conditions — are a normal part of the negotiation process. They are 'protected' from penalties but may be assisted through mediation.

### *Industry-wide dispute resolution*

Industry-wide disputes arise from issues and events external to the workplace, such as changes to industry-wide arrangements or to relevant state and federal employment, taxation or other policies. While it may not be possible to resolve such disputes using the site-specific resolution procedures outlined above, clear communication about what is happening on site is still crucial. Resolution of these disputes must take place at an industry or political level, and may involve industry and employer associations, unions, State and Federal Industrial Relations Commissions, government agencies and other third parties.

Even where they occur during a formal enterprise bargaining period (including negotiations for new pattern agreements), strikes and bans arising from industry-wide disputes are unlikely to be 'protected industrial action' as they do not relate to certified agreement negotiations. Hence, they may be subject to court injunctions and other legal remedies, although this has yet to be fully tested in building and construction.

## Performance effects

Consultations with interested parties revealed a widespread view that there has been improvement in workplace management, communication and dispute resolution on large building sites during the 1990s. Related to this, various parties spoke of a general — though by no means universal — improvement in workplace culture, manifested in greater professionalism and maturity in workplace communications. However, some parties consulted thought that autocratic management styles and adversarial relations remain all too common on large building sites. Others said that many (mostly smaller) subcontractors still lacked professional management and communication skills in relation to their employees and head contractors.

To the extent that there has been an improvement in management practices and communications among head contractors, this appears to have been encouraged partly by the move to fixed price contracts, which increase the pressure on head contractors to be proactive in identifying and addressing potential construction problems and delays and thus keep the site on schedule. Another factor for both head contractors and subcontractors has been changes in the general industrial relations landscape which require effective consultation and negotiation in agreement-making at industry, trade, project and enterprise level. This in turn encourages improvement in communication, consultation and problem-solving in day to day work practices.

Since the late 1980s, there appears to have been a decline in the incidence of site-specific industrial disputes. This reflects the move to fixed price building contracts (see chapter 2), as well as changes in the attitudes of the different parties in resolving disputes. However, the rate of dispute related delays in building and construction remains well above the economy-wide average (see chapter 2). Anecdotal evidence suggests that this is due to a high incidence of industry-wide disputes. This must have a negative effect on workplace performance.

## 4.2 Skills and training

The building and construction industry has undergone considerable change in the last decade which has affected how people are employed, the work they carry out and the types of skills they require. Increasingly, on large capital city building projects, subcontractor employees are undertaking more specialised tasks in an environment of rapidly changing building technology. Such changes can affect training needs, the types of training available, workers' entitlements to training, how training is funded, and how training impacts on workplace performance. Before examining each of these aspects, it is useful to describe how skills and competencies are defined.

### *Industry skills classifications*

A wide variety of skills and occupations are needed through the various stages of any large scale construction project. Most workers in building and construction are tradespersons and labourers. Although the industry has a high proportion of vocational education and training (VET) qualifications, it has relatively few higher qualified workers and lower English literacy and numeracy skills than the rest of the Australian workforce in general (chapter 2).

The range of occupations in building and construction is reflected in the task/skill related classification scales. These are set out in industry awards and form relatively comparable remuneration scales across occupations. The NBCIA 1990 defines a set of skills against seven levels known as Construction Worker 1-7 (CWs). For example, non-licensed trades (such as bricklaying, plastering or carpentry, which require a four year apprenticeship) are equal to CW3-5. Paralleling the NBCIA 1990, licensed trades (electricians and plumbers) follow their own awards' classification structures with up to 10 levels, starting at a level approximately equal to CW5. Enterprise agreements usually mirror these classifications. However, some head contractors have made variations to the award classifications. Subcontractors' employees generally retain traditional occupational titles while using the award skill classifications as the basis of remuneration.

Under the awards, workers can move up the classification system (and hence up the remuneration scale) by undertaking training relevant to the classification. More recently, in response to the development of national competency based training, formal industry training packages have been established which require workers to achieve Australian Qualification Framework (AQF) competency standards across a range of skills rather than just the job specific tasks often associated with the CW classification scale.

Although the CW system has contributed to reduced demarcation, the AQF system can allow for better multiskilling and flexibility for workers than the more traditional occupation-based training and skills recognition systems, particularly for semi-skilled and unskilled workers. For example, a semi-skilled builders' labourer can acquire (and be recognised for) some carpentry skills, some steelwork skills and licenses to operate forklifts, hoists or other machinery and hence move horizontally between jobs as well as vertically up the classification (and pay) structure. This delivers benefits to both individual workers (better skills and pay) and their employers (higher labour productivity and flexibility).

## Training patterns

### *Head contractors*

Head contractors employ only a small number of people in key management (for example, site and project managers) and other strategic positions on site (such as, material handling crews and safety officers). Management staff tend to be employed on a permanent or fixed contract and may be salaried rather than wage employees. Although some management training occurs, industry participants felt that more is needed. Discussions with industry participants revealed site employees of the head

contractor often have a clearly defined career structure and better access to training than most subcontractor employees. It is not uncommon for these (relatively few) head contractor employees to move to CW5-7 classifications over a number of years by undertaking courses to meet increasing AQF competencies.

### *Subcontractors*

Subcontractors on large capital city building sites are the main employers of trades, semi-skilled and unskilled workers. They usually specialise in a single trade or construction stage like formwork, plumbing or plastering. This specialisation is reflected in the skills and training of their employees, who will have trade specific qualifications and experience and little access to multiskilling training outside their field.

Semi-skilled employees still tend to undertake training only within their subcontractors' field of specialisation, but sometimes undertake additional training offered by the head contractor for a particular skill or method that is required on site. Among subcontractors, larger firms are more likely to provide competency based training than smaller ones, although in most states, various industry funded training schemes (and grants) are generally available to all employees through industry associations, unions and other providers.

Relatively high levels of mobility in building and construction (see chapter 2) reduce the incentives for subcontractors to invest in further trade training of their employees. Subcontractors focus on employing the appropriate skills for a job and completing the work as quickly as possible. Where workers undertake specialist training additional to their basic trades qualification which does not raise their productivity in their current job, training may lead to credentialism, increase training costs and be inefficient.

## Types of training

For head contractor and subcontractor employees to enter and remain in the industry, different types of training are required (box 4.1).

CTA (1998) estimates there were around 40 000 building and construction apprentices in 1997, including 16 700 electrical apprentices. The total number of building and construction trades apprentices declined sharply between 1990 and 1993, from 53 000 to 41 600, and has subsequently remained stable. Unlike previous economic cycles, apprenticeship numbers did not rise again in line with industry activity and employment after the early 1990s recession (CTA 1998). The

Queensland Civil Contractors Federation (CCF) observed that the 'number of apprenticeships is reducing and we will have a problem in future years' (Civil Contractors Federation (Queensland), Response 10, p. 8). Similar concerns have been expressed by senior officials of the CFMEU (see for example Fraser 1999).

### Box 4.1 Types of training for employees

Entry level training in building and construction consists of apprenticeships for trades occupations, traineeships for some skilled and semi-skilled occupations and on the job training and development for those entering the industry as skilled but unlicensed tradespersons.

- The 'traditional' apprenticeship, based on time and involving complex licensing arrangements, has undergone significant changes in the last few years. 'New apprentices' can now complete their apprenticeship once satisfactory competency levels are achieved – often within two to two and a half years – through a more flexible mix of formal TAFE and on the job training. Group training schemes for apprentices funded primarily through government grants have also grown in popularity. They are managed in each state by companies jointly run (and funded by) industry associations and unions.
- Traineeships appear to be more common among head contractors as they employ graduates and students for training in middle management roles. Competency based traineeships can also provide the means for subcontractor employees to enter the industry as a CW1 and move up through the CW classifications.

Specialised and further training can occur when:

- workers multiskill by gaining specialist skills such as machinery operation licences and safety officer training (collecting tickets for hoists, cranes and other machinery is encouraged on many sites, and sometimes appears to be used as a 'reward' system for workers);
- formal skills such as those gained through apprenticeships become outdated as new construction technology and techniques are adopted (tradespersons are required to attend refresher courses to keep up with technological change in their field);
- workers gain most of their core skills through on the job experience and training (many workers in the industry have no formal post-school training (chapter 2) with most engaged in tasks such as formwork and labouring); and
- workers attend formal inductions to gain entry to a site (site and safety inductions) and undertake new work tasks (work method training).

Head contractors have their own management training programs (for example, Multiplex has introduced Frontline Management Training) in conjunction with tertiary providers. It appears that subcontractors offer employees in management roles (such as foremen and leading hands) little, if any, formal management training.

In consultations for this study, several reasons were advanced for the decline in apprentices. The Master Builders' Association of Victoria (MBAV) argued that increasing specialisation of subcontracting and an associated reduction in firm size was a major factor. This has reduced the range of skills any one subcontractor can provide to apprentices and has made it relatively more costly to take on an apprentice. The MBAV also noted that the public sector has traditionally been a large employer of apprentices but privatisation of government business enterprises (such as gas, water, electricity and transport) has led to fewer apprentices (MBAV, Response 42).

The low profit margins in building and construction also reduce the capacity of employers to hire apprentices. Some responses to this study said that 'fixed per worker' remuneration components, such as on-costs and allowances, make apprentices costly to employ, given their relatively lower productivity. As well, the main cost of apprentice training is borne by the employer while the worker captures most of the benefits at a later date. Unlike training for most other skilled and professional occupations (through TAFE or university), apprentices get paid a wage while undertaking their training.

Consultations with interested parties also revealed that many firms prefer to employ more specialised skilled labour with fewer commitments to ongoing employment. Other reasons for the declining popularity of apprentices in the industry include:

- improved school retention rates and higher education participation and associated declining popularity of VET among young people; and
- better immediate pay and better (safer) conditions in other industries (especially services). Building and construction has an image of dirty, unsafe workplaces which makes it relatively harder to attract young entry level workers (CTA 1998).

One response to the decline in single firm apprentices has been the introduction of group training schemes. These schemes improve flexibility for both apprentices and employers. Master Builders' Associations first introduced group training in the mid 1970s. Apprentices have benefited by gaining experience from a range of employers (typically spending 6 to 12 months with each employer) and employers are not required to commit to providing employment for a full apprenticeship term. Around 30 per cent of apprentices in building and construction are now employed through group training schemes. However, discussions with interested parties and responses to the research issues brief revealed a concern that some apprentices are hired by firms for such short periods that skill formation is inhibited. Some are also concerned that group schemes can be simply a form of cheap labour hire and firms may join the schemes primarily to obtain the government provided training subsidy.

Overall, while the need for specialist training may vary across projects, in general the access does not. In particular, although subcontractors employ most of the labour on large capital city building sites, head contractors appear to contribute the most specialised and further training for both their own and subcontractor employees. Detailed consultations for this study revealed that head contractors place most emphasis on providing training for their employees. In contrast, the training of subcontractor employees appears to be mainly limited to site based inductions organised by head contractor employees. It may be in the head contractor's interest to supplement the formal skills of subcontractor employees in order to improve site productivity.

## Entitlements

Head contractor enterprise agreements generally provide the most training entitlements to their employees. These usually centre around establishing a training/skills program. Sometimes a committee of workers and managers oversee the program. The broad principles of the programs can include commitments to on the job training, opportunities for career progression and skills based reward. Programs are normally based on industry competency standards (the CWs) and increasingly are being linked to new salary style conditions being introduced in the agreements (chapter 6). Some enterprise agreements specify that the firm will provide opportunities for the lowest skilled worker to progress to the highest skilled classification. They can include commitments to regular training opportunities and skill reassessments. Generally, enterprise agreements note that the provision of training is to be based on both company and worker needs. They also usually specify that training can be undertaken both on and off site at the company's expense.

Subcontractor enterprise agreements can vary considerably in the specification of training to be provided by the firm. While it is common for these agreements to include training entitlements under WHS arrangements, for some firms this is the only reference to training. Generally, most enterprise agreements make commitments for training to be provided within the industry competency standards framework. Some enterprise agreements have established skills development programs similar to those specified in some head contractor agreements.

In addition to trade specific skills, training provisions in enterprise agreements can also cover other vocational skills. For example, it is not uncommon for subcontractor enterprise agreements to specify the maximum number of days (usually 5 to 10) per year that union delegates and safety officers can receive paid leave to attend union approved courses.

Training entitlements in project agreements are relatively minor. They primarily include commitments to provide WHS training to an appropriate number of safety and first aid representatives. The specifications for inclement weather arrangements also usually allow for the provision of practical and relevant training. Sometimes project agreements specify the number of apprentices per tradespersons to be employed on the site and commit parties to training initiatives specified in awards.

## Sources of funding

Employers in building and construction generally spend less on non-apprenticeship training than employers in other industries. In 1996, employers in building and construction spent slightly over $100 per employee compared to the all industry average of around $185 (CTA 1998, p. 20).

The level of spending by building and construction employers on training is partly dependent on funding arrangements which do not rely solely on direct employer contributions. Funding for training varies between jurisdictions. In South Australia, Western Australia, Tasmania, the ACT and Queensland, a levy based on the value of building activity is used to provide funds to State and Territory Government organisations (CTA 1998). These organisations typically include representatives from employer associations, unions and government. The Housing Industry Association is opposed to compulsory training levies, claiming that they impose costs and encourage the inefficient use of resources (Jones 1998). In some jurisdictions, including New South Wales, Victoria and Queensland, earnings from industry redundancy funds are used to fund training (chapter 6). The funds are jointly owned by employer associations and unions.

The allocation of training funds from State Government organisations and redundancy schemes varies between jurisdictions. Examples include subsidising employers for training undertaken by individual employees, directly delivering training, and providing grants to employers, employer associations and unions for specific projects. Employers, employer associations and unions also fund training directly.

Union influence over funding can affect the types of training provided. Some responses to the research issues brief noted that training is not being directed toward the multiskilling of workers or the break down of skill classifications that result in demarcation of trade areas on sites. Overwhelmingly, the skills training is designed to enhance the specialisation of trade labour on sites.

### Performance effects

The introduction of competency based training is likely to improve multiskilling in the longer term. This can increase labour productivity and reduce unit labour costs. However, in the short term, the increased standards required of workers in some areas (such as in the introductory units in the CW1 traineeship) can raise unit labour costs as workers can be required to be absent from work for longer periods of time than in the past.

Group training schemes appear to be having positive effects on performance. In the longer term, the entry of more skilled labour through group schemes can increase labour productivity. The schemes can encourage the use of apprentices among firms who might not normally have engaged an apprentice. They also allow firms to engage apprentices at lower unit labour costs than those normally associated with fully indentured apprentices. However, in some cases firms may use these schemes primarily as a source of cheap labour and to obtain the government subsidy. The skill formation of apprentices can also be restricted through short duration work placements and the allocation of menial tasks.

Use of earnings from redundancy funds for training can place pressure on those funds to be raised in order to meet training program needs, especially given the lack of incentives for subcontractors to invest in training their employees. Moreover, a large pool of funds may lead to an over investment in training, particularly when the system of remuneration rewards workers according to the skills they have accumulated rather than the skills that are required to undertake tasks.

## 4.3 Workplace health and safety

WHS is of particular importance in building and construction due to the continuing high incidence of fatalities and injuries compared with other industries. Nationally, accident rates have fallen during the 1990s, but remain well above most other industries. Data are not available for fatalities and injuries on large capital city building sites only. Data presented here are for building and construction as a whole.

All parties on large building sites have important WHS responsibilities. Subcontractors are responsible for their own employees' safety and for payment of workers' compensation premiums, while head contractors are responsible for overall safety on the site, including inspections, procedures and training. Unions, employer associations and government agencies also play an active role in WHS monitoring, training and enforcement. Some improvement is evident in WHS consultation mechanisms, in safety dispute resolution procedures and in inclement weather arrangements.

## Workplace fatalities

Between 1993-94 and 1995-96, 153 people employed in the Australian construction industry died in work-related incidents. The fatality rate for building and construction workers was almost three times the economy-wide average, with 15.2 fatalities per 100 000 workers, compared with 5.6 fatalities per 100 000 workers for all industries. Only the mining, and transport and storage industries had higher fatality rates (22.2 and 20.8 fatalities per 100 000 workers respectively) (Worksafe Australia 1998). Data are not available on the number of fatalities that occurred in each of the commercial, residential and engineering construction sectors.

Recently, there has been some concern that fatalities in the industry appear to be rising again as construction activity nears a peak. In Victoria, there were nine deaths on building sites in the first six months of 1999, compared with an average of 13 deaths per year for 1994-95 to 1997-98. Five deaths were caused by falls from high work sites and three by electrocution. In direct response to this, a tripartite 'All Party Agreement on Construction Safety' was reached between the Victorian Workcover Authority (VWA), employers and unions. The Agreement emphasises a 'joint safety compact', with stronger enforcement of WHS laws and increased on-site inspections by VWA officers, concentrating on high work sites (VWA 1999).

## Workplace accident trends

Worksafe Australia collects national data on occurrences of work-related injuries and disease based on workers' compensation claims of five days or more. The data exclude Victoria and the ACT due to incompatible collection and classification methods (for example, Victorian data include only incidences resulting in claims of ten days or more). They also exclude all injuries not resulting in workers' compensation claims, such as injuries to self-employed workers and others not covered by workers' compensation, and hence are a minimum estimate of total accident and injury occurrences.

Worksafe Australia data show that the incidence of injury in building and construction is significantly higher than the economy-wide average. Between 1993-94 and 1996-97 building and construction had approximately 70 per cent more injuries per 1000 employees than the average for all Australian industries (figure 4.1). Over this period, Worksafe Australia recorded over 48 000 work-related injuries to building and construction employees (excluding Victoria and the ACT) (Worksafe Australia 1998). Data are not available to show the proportion of these injuries that occurred on large capital city building sites.

Figure 4.1 **Incidence of injury, 1993-94 to 1996-97[a]**

Per thousand employees (wage and salary earners)


**a** Excludes Victoria and the ACT. In 1995-96 the Victorian construction industry had an incidence rate of 22.84 injuries of 10 days or more duration per thousand employees (wage and salary earners).

*Data source:* Worksafe Australia (1998).

The incidence of injury decreased by around 24 per cent in building and construction between 1993-94 and 1996-97 which is the same rate as the economy-wide average. Longer term trends and differences between states are not clear due to inconsistencies in data collection methods and definitions over time and between jurisdictions.

For the period 1993-94 to 1995-96, the most common type of injury in building and construction was back injuries (23 per cent of injuries), followed by injuries to ears and hands (16 per cent and 13 per cent respectively). Around 30 per cent of injuries related to muscular stress from lifting, carrying, or putting down objects. A further 23 per cent were caused by falls, trips and slips and 16 per cent were 'sound and pressure' injuries due to long-term or excessive noise. The share of this latter category increased over the period (Worksafe Australia 1998). This suggests that while there may have been increased awareness in the industry of immediate physical hazards, safety measures addressing exposure to loud or constant noise may need to be improved with, for example, better hearing protection. This may also be true for other cumulative injury hazards, since workers aged over 55 were almost three times more likely to suffer an injury resulting in a claim than workers aged under 24 (1995-96 data, Worksafe Australia 1998).

## Workplace injury costs

The cost of workplace injuries to employees, employers and the community are large. Injured workers and their families experience diminished quality of life and reduced income. Employers bear the cost of workers' compensation premiums, legal penalties and reduced workplace productivity and morale. The wider community bears the cost of any social welfare and public medical costs. It has been estimated that employers, workers and the community bear approximately 40 per cent, 30 per cent and 30 per cent of these costs respectively, with the ratio of indirect costs to direct costs ranging from 1:1 to 7:1 (Industry Commission 1995).

The relatively high incidence of fatalities and injuries in building and construction is reflected in high workers' compensation costs, both in terms of direct costs per injury or per employee and in premiums paid by employers.

In 1996-97, the total cost of workers' compensation to building and construction employers was $454m. The average cost per injury occurrence was $9200, significantly higher than the all industry average ($7400) and higher than all other industries except mining ($13 700) (preliminary data, Worksafe Australia correspondence). The cost of workers' compensation per employee was nearly double the economy-wide average, but considerably lower than mining. Workers' compensation costs make up a greater share of total labour costs for building and construction than for mining and other industries (table 4.1).

Table 4.1 **Workers' compensation costs, selected industries, 1996-97**

| *Industry* | *Total workers' compensation costs ($ million)* | *Workers' compensation costs per employee ($)* | *Workers' compensation share of total labour costs (%)* |
|---|---|---|---|
| Building and construction | 454.1 | 1 302 | 3.5 |
| Mining | 158.8 | 1 987 | 2.5 |
| Manufacturing | 1 208.1 | 1 242 | 3.1 |
| Electricity gas and water | 93.6 | 1 493 | 2.5 |
| Transport and storage | 363.6 | 1 184 | 2.6 |
| **All industries** | **5 001.9** | **719** | **2.0** |

*Source:* ABS (1998e).

Although the incidence of injury in building and construction declined between 1993-4 and 1996-7 (figure 4.1), the cost of workers' compensation per employee rose by 19 per cent, after being relatively stable over the previous seven years (ABS 1998e). The main sources of these increases were in New South Wales, where average premium rates increased, and in Queensland, where legislative changes extended employers' liability from the first day of injury to the first five days.

These high costs are reflected in above average industry premium rates (or 'class ratings') for building and construction (table 4.2). In New South Wales, building and construction has a single class premium rate of 9.36 per cent, the same as the rate for coal mining. In Victoria, there are 21 different 'class ratings' for building and construction, ranging from 2.7 per cent for electrical work (the same as for coal mining in Victoria) up to the maximum rate of 8.4 per cent for concreting, bricklaying and roof tiling (the same as for industries such as logging and meat processing). These class ratings are combined with each firm's own claims history (or 'experience rating') and its payroll size in calculating the actual premium amount. Individual firms can reduce their experience rating — and therefore their premiums — by improving their claims records.

Table 4.2 **Workers' compensation industry premium rates, 1998-99**
Percentage of payroll

| *Industry class rates* | *NSW* | *Vic* | *Qld* | *SA* | *WA* |
|---|---|---|---|---|---|
| Lowest industry rate | 0.52 | 0.33 | 0.37 | 0.40 | 0.40 |
| Highest industry rate | 15.36 | 8.40 | 15.00 | 7.50 | 10.73 |
| Average industry rate | 2.80 | 1.90 | 2.14 | 2.86 | 2.73 |
| Non-residential construction rate | 9.36 | 4.78 | 4.99 | 4.80 | 5.20 |

*Source:* Victorian Workcover Authority (1998).

As well as these direct premium costs, workplace injuries lead to significant lost working time. In 1995-96, the average absence from work due to an injury resulting in a workers' compensation claim in building and construction was 10.06 weeks per injured employee, compared with an average of 9.11 weeks for all industries (excluding Victoria and the ACT, Worksafe Australia 1998). These data exclude employee absences due to illness or to injuries not severe enough for a workers' compensation claim and absences by workers not eligible for workers' compensation, such as self-employed workers.

## Site safety responsibilities

All businesses in all industries have obligations under state and federal WHS legislation to provide a safe working environment for their employees (Industry Commission 1995). Subcontractors are the major employers on large city building sites. As such, they have a legal duty of care toward their employees, as set out in workers' compensation and WHS legislation. However, responsibility for safety of the whole construction site ultimately rests with the head contractor. As stated in the VBIA:

> the principal contractor has an overall responsibility for safety on the job site, irrespective of whether work is carried out by his/her own employees or by

> subcontractors or their employees, but this in no way removes the obligation of individual subcontractors or their employees to observe the appropriate Safety Act ... Every person on a job site has a responsibility. (VBIA 1996–2000, c. 19.1).

This overlapping of safety roles and responsibilities can create tension on site, particularly where the various responsibilities are imperfectly defined or managed. Head contractors are not usually large employers of labour on site and therefore do not bear large direct workers' compensation costs. However, head contractors are under constant pressure to reduce construction costs and time schedules. Workplace accidents and safety breaches can cause significant delays and hence there is an incentive for these to be minimised by both head contractors and subcontractors. In addition, negligent head contractors can be held legally liable for accidents on their site and most are aware of the damage that workplace injuries and fatalities can do to their long term commercial reputation. Many head contractors therefore take safety — and safety consultation — very seriously, both for their own employees and for their subcontractors. Despite these many considerations, examples still exist of contractors who cut corners to minimise immediate costs at the expense of safety.

Industry consultations and Mayhew (1997) identified an increasing trend for head contractors to make WHS performance a part of the contract process with subcontractors and to establish a regular relationship with subcontractors who have a strong understanding of WHS. For example, as part of their contract specifications, subcontractors are often required to present work method statements to the head contractor for approval. These must include work procedures and WHS safeguards for each task. Some head contractors consulted for this study said that including WHS standards in tender specifications was necessary because there are still problems with older workers and subcontractors who have out of date work practices or poor attitudes to safety. This is a work culture issue that is expected to dissipate over time.

Workcover authorities in Victoria, New South Wales and other states have developed WHS checklists, guidelines and other material for construction trades subcontractors to assist with this process. For example, in Victoria, VWA has produced a series of WHS checklists covering most construction trades and tasks, while the 1999 'Agreement on Construction Safety' commits both head contractors and subcontractors to work together to lift their WHS performance (see above).

In New South Wales, a WHS 'Memorandum of Understanding' between the New South Wales Government (WorkCover NSW) and 17 large construction firms was signed in October 1998, with support from the industry's trade unions and employer associations (Construction Policy Steering Committee, Response 40, p. 3). The MOU is a statement of 'understanding and public commitment' to WHS

management, consultation and implementation. Among other things, the MOU commits the signatory head contractor companies to:

> provide assistance to subcontractors in preparing safety plans and require subcontractors tendering for work to demonstrate Occupational Health and Safety (OHS) competence against set OHS criteria. … To ensure subcontractors are given practical support to manage safety on site. (NSW MOU 1998, p. 3)

On all large building sites, the head contractor's site manager is assisted and advised in day-to-day WHS matters by a site safety officer. The safety officer usually coordinates the site safety committee, monitors subcontractors' safety plans and work method statements, conducts WHS inspections, organises site inductions and reports potential WHS breaches and hazards to the site manager. The safety officer position is additional and separate to any elected workers' safety representative, but is often also the chief union delegate on site (termed 'shop steward' in Victoria).

In Victoria, the VBIA requires the head contractor to appoint a safety supervisor or officer on all sites where the VBIA applies, who 'shall be given the necessary authority to ensure that all laws, procedures or Codes of Practice are observed … [and] shall be experienced in the work being performed' (VBIA 1996–2000, c. 19.2.1). The safety supervisor and the elected safety representative are jointly responsible for safety inspections, investigation of complaints and breaches, ensuring all laws, procedures and Codes are observed and promoting safe work practices (c. 19.4). However, as the most senior manager on site, the head contractor's site manager retains overall responsibility for WHS management and compliance on site.

## Safety consultation, promotion and enforcement

In all construction companies consulted, the safety officer worked closely with a site safety committee, comprised of head contractor management, larger subcontractors and employee representatives. Safety committees generally meet at least once a week to discuss WHS, to conduct walk arounds (site inspections) and to proactively address any identified safety issues with minimal disruption to the site. Membership and duties of safety committees are specified in the VBIA (c. 19.5), in some States' WHS legislation and often in tender specifications or project agreements.

In New South Wales, the *Workplace Injury Management and Workers' Compensation Act 1998* enables WorkCover NSW to 'assist in the establishment and operation' of safety committees in all larger workplaces, including construction sites (s. 23 (1)). The New South Wales 'Memorandum of Understanding' (1998) further commits the signatory companies to 'improve the effectiveness of site safety committees … by effectively communicating and focusing on OHS issues' and by

ensuring 'appropriate management representation' and commitment to the committee (NSW MOU 1998, p. 3).

With regard to inspections and enforcement, WHS authorities in each state employ safety inspectors to identify and report safety breaches and to enforce WHS legislation. They also promote WHS awareness and self-regulation through advertising campaigns and through assistance with WHS management, planning and training in the workplace. In consultations for this study, many industry participants observed that there is an increased emphasis on 'self-management' of WHS and fewer government inspectors attending construction sites than in the past, with some variation across states. As discussed above, WorkCover NSW has an MOU with the larger construction firms to encourage on-site commitment and enforcement of WHS. The VWA recently reached a similar agreement with Victorian construction parties and announced an increase in inspections and enforcement (VWA 1999).

Unions and employer associations also take a very proactive role in safety in building and construction and often appear to be the driving force behind developing and monitoring safety standards and procedures on site. Union concern with safety can be seen in their emphasis on providing safety training, equipment and procedures and in their close monitoring of safety breaches. For example, unions encourage members to formally report all alleged safety breaches. In Victoria, the CFMEU and ETU use their own radio programs, 'Concrete Gang' and 'ETU Radio News' to publicise training programs, safety breaches, and industry wide WHS issues such as toxic waste and asbestos.

## Safety training and inductions

One of the most important mechanisms to reduce the incidence of fatality and injury is to train all workers to undertake work in a way that minimises the risk of injury. Construction workers undertake a variety of safety training over their careers, including:

- safety training conducted as part of entry level training for trades and skilled occupations (apprenticeships and traineeships) and on the job training for labourers. This covers general safety procedures for their occupation;
- safety training on entering a new firm. This tends to be confined to head contractors and large subcontractors hiring new employees and covers safety procedures specific to their own trade and company. Many larger firms also conduct ongoing safety training as their tasks and work procedures change. This training can be on the job, in-house or external and can be coordinated to coincide with company down time (for example, between projects or during extended periods of inclement weather);

- site safety inductions, designed and conducted by the safety officer for all new workers on site. This is necessary because each site is different in geographic layout and design and therefore in entry and exit routes, materials handling, amenities and safety hazards. Inductions can run from about an hour to a full day, depending on the size and nature of the site;
- union safety training programs either as part of the training listed above, or as a separate and additional program. Unions issue safety training certificates or 'tickets' to members completing the programs, which are then sometimes used as a requirement for working on some sites; and
- safety training programs, conducted by the Master Builders' Associations and trades associations in each state, for employees of their members, either as part of a company's induction program or as a separate and additional program.

## Safety dispute resolution procedures

All of the large building sites visited for this study had a site safety committee, convened by the head contractor's safety officer and attended by management, many (but not all) subcontractors on site and by employee representatives. These committees provide an immediate avenue for identifying, and addressing safety problems and can help to prevent safety breaches from escalating into disputes.

Where a dispute between employees and a subcontractor or head contractor arises over an alleged safety breach (for example, over whether a breach has occurred or how it should be rectified), there are specific procedures to be followed. These are set out in industry, pattern, enterprise and project agreements and in Government Codes of Practice and are slightly different to the general dispute resolution procedures outlined in section 4.1. In particular, affected employees are entitled to be paid during safety breach disputes where correct procedures have been followed (but may not legally be paid during other industrial action or where a safety-related stoppage is found to be not genuine). The *Occupational Health and Safety Act 1985* and relevant state WHS legislation must also be followed.

For example, in New South Wales, the *Workplace Injury Management and Workers' Compensation Act 1998* requires that the workplace WHS committee should firstly attempt to resolve any safety-related dispute, but if unable to do so, should request an inspector from WorkCover NSW to undertake a workplace inspection (s. 24 (7)). Similarly, in Queensland, a government WHS inspector or a QMBA advisor can be requested to assist on site (QMBA Response 43, p. 2).

In Victoria — where arguably, adversarial workplace relations remain more in evidence than in other states — the VBIA sets up a consultative process whereby

the head contractor's safety supervisor and the worker-elected safety representative (both members of the safety committee and both usually union delegates) must agree that there is an immediate WHS threat before work ceases in the affected area of the site. If they cannot agree, then mediation assistance may be sought from unions and employer associations, the VBIDB or VWA inspectors. As in other states, affected workers can be relocated to safe work areas, can wait in amenities facilities or be sent home with no loss of pay until the problem is rectified (VBIA 1996–2000, c. 19.6). Unique to Victoria, the VBIDB is available to mediate in safety-related disputes upon request from one or more parties on site and may order remedial action, payment (or non-payment) of wages and/or recommencement of work (see section 4.1).

In the late 1980s, unions were often accused of using WHS as an industrial tactic, stopping work for alleged safety breaches during disputes over other issues. This sometimes led to employer scepticism regarding legitimate WHS concerns (AMCA, Response 12, p. 2). This situation appears to occur less frequently now than in the past. However, where there are other issues in dispute between managers and employees on site (for example, over a union official's right of entry to a site), union involvement in site safety inspections and monitoring may aggravate pre-existing disputes or disagreements. In these cases, mutual trust and cooperation can be compromised by, on the one hand, a perception that union officials sometimes have a 'vested interest' in finding safety breaches (for example, so they can remain on site), and on the other hand, a perception that head contractors and subcontractors have a vested interest in not finding safety breaches (so that work is not delayed or costs increased in the short term).

Nationally, there is evidence that unions and management are behaving more cooperatively in resolving disputes relating to safety breaches than in the past. As stated above, most if not all large construction sites now have a formal safety committee on site. Anecdotally, better attention to safety training, to work method statements and to consultation in day to day site management and work tasks appear to be lowering the incidence and effect of genuine safety related disputes. In line with the demise of 'one-out-all-out' in other work arrangements, it is now usually only the affected parts of a site which are closed until the problem or hazard is rectified. However, 'one-out-all-out' still occurs on occasion, particularly in Victoria, and particularly where other non-related disputes are occurring simultaneously on a given site.

### Inclement weather arrangements

A large amount of building and construction work is performed outside or in partly unprotected areas. It is sometimes unsafe or unreasonable to continue working when

conditions are wet, windy, extremely hot or extremely cold. Some work tasks cannot be performed satisfactorily (or at all) in certain weather conditions.

Procedures for inclement weather periods are detailed in awards and agreements, primarily focusing on arrangements for wet weather and on limiting pay entitlements for periods of inclement weather. The three main plumbing awards and the NBCIA 1990 contain virtually identical inclement weather procedures, but do not define the exact temperatures or rainfalls which constitute 'inclement weather'. Instead, 'a conference between employers, employees and/or their representatives must be held within 30 minutes to determine whether conditions are inclement'. These awards specify conditions for daily hire employees (but not weekly hire) that limit employees' entitlement to payment for inclement weather periods to 'no more than 32 hours in any 4 week period' and allow them to go home if inclement weather has prevented them from working for more than four hours or has commenced in the final two hours of their ordinary shift. This means that wage payments for periods of inclement weather do not continue indefinitely and workers may not automatically leave the site. Workers required to complete a concrete pour or undertake emergency work during inclement weather are to be paid double time (NBCIA 1990, c. 22). To date, these provisions have not been altered by the award simplification process.

Nearly all industry, pattern and project agreements covering employees on large building sites contain procedures for inclement weather. These provisions vary across trades and by state, but are similar in intent. A typical example of current formal arrangements is the MPA-CEPU pattern agreements for New South Wales and Victoria (which contain identical procedures):

> Where there is dry access, useful work within the employee's classification and covered transport or sheltered walkways provided by the employer where required, employees can be transferred to a sheltered area and continue work.
>
> Employees may be relocated to another company site ... not affected by inclement weather and the employer provides, where necessary, transport.
>
> Planning, consultation and agreed training may be undertaken ... provided ... training is:
> - relevant, accredited and completed before any return to work;
> - consistent with the national competency standards (Above Trade) and the trade and non-trade training systems;
> - provided by accredited providers of training;
> - not to undermine and / or include apprenticeship training; and
> - adequately equipped training facilities are available (MPA-CEPU plumbing pattern agreement, 1997, App. 2, c. 7; MPA-CEPU Victoria plumbing pattern agreement, c. 9).

Some enterprise agreements are less detailed in their inclement weather provisions. In particular, some head contractors have preferred to refer to general WHS

principles rather than specifying exactly what should happen during inclement weather. For example, Grocon has simplified its formal procedures to following general company and client safety standards and allowing for emergencies:

> 10.4 ... where extremes of temperature are encountered, client practice and Occupational Health and Safety principles and standards shall apply.
>
> 10.5 In all cases, the employer will not require employees to work in the open in the rain except where the need arises to maintain safety or in emergency situations. (Grocon Enterprise Agreement, 1997–2000)

In the past, interpretation of these arrangements caused significant disputes and delays. As noted in one response:

> [t]he provision in awards leaves an onus on common sense, which is not always forthcoming. (MPMSA, Response 26, p. 3)

Like safety, delays due to inclement weather appear to have lessened over time. It is no longer always the case that a whole site will close when part of it is affected by inclement weather, although this still occurs on some sites, most notably in Victoria where there is still some resistance to workers transferring to other work locations.

There also appears to have been a general improvement in attitudes to inclement weather arrangements, although this is not universal. Some employers believe that inclement weather is still used as an industrial tactic by unions, or complained that many workers are still not prepared to walk through the rain to get to dry work areas, even if they are given protective clothing or umbrellas.

On many (but by no means all) sites it is now recognised that inclement weather is fundamentally a WHS issue which can be managed proactively. For example, many head contractors and subcontractors provide their workers with rain coats for wet weather and cooled drinking water, sunhats, sunglasses and sunscreen in hot sunny conditions. Where properly equipped, workers on some sites continue to work in light drizzle when it is safe to do so. Most workers will keep working during inclement weather if their area is not affected, particularly in New South Wales and Queensland. Demarcation disputes over whose job it is to mop up after rain have all but disappeared.

Some subcontractors now try to manage work tasks around expected inclement weather. For example, during the construction phase, formworkers and steel workers can work on the top-most exposed levels of the site during good weather and deliberately leave part of the finishing work on lower, more sheltered levels to be done on wet days. In this way, they can alter work schedules so as to work through several days of inclement weather with no loss of production time. Other subcontractors said that they try to use inclement weather periods for training or for

staff meetings, although these can be difficult to organise at short notice or to fit into short periods of bad weather.

Even in the northern states, heat does not appear to cause as many delays as does wet weather. In Queensland, informal arrangements to commence work early (without penalty rates) to avoid mid-day heat and humidity appear to be common. In contrast, some Victorian sites still follow a long-standing (and largely informal) tradition of stopping work on the entire site when the external temperature reaches 35 degrees, even though lower levels of the site may be considerably cooler.

## Performance effects

It is in the interests of all parties on major building sites to minimise safety breaches and WHS risks. Where safety training reduces the incidence of fatalities and injuries, labour productivity is likely to improve and unit labour costs decline. In the longer-term, subcontractors are likely to incur lower workers' compensation premiums and fewer employee absences as the incidence of injuries decline. However, increased safety training can raise short-term unit labour costs and, where a limited training budget exists, limit other specialist skills training opportunities which may also improve safety and productivity.

In addition to training initiatives, increased attention to workplace consultation and participation in WHS has also been shown to improve WHS performance. Recent American research (Weill 1999) has found that WHS committees similar to those now found on most large Australian building sites can significantly improve WHS compliance, particularly where they are combined with an active union presence. In Oregon, where WHS committees were made mandatory in all private sector workplaces in 1990:

> [WHS] committees significantly increased ... OHSA [that is, WHS] enforcement, with enforcement strengthening considerably in union workplaces but edging up only slightly in non-union workplaces. (Weill 1999, p. 339)

This supports earlier research into the American construction industry which found that employee and union participation in routine WHS inspections (or 'walk arounds') led to significantly higher levels of WHS enforcement, citation and penalties (Weill 1999, p. 340). Similar benefits could be expected to have arisen in association with the safety committees now found on most Australian building sites.

# 5 Work hours and hiring arrangements

This chapter examines arrangements for work hours (including rostered days off), hiring, termination and redundancy on large capital city building sites.

Variation in demand for labour associated with large capital city building work can be pronounced. Existing work arrangements tend to accommodate this feature. There have been several areas where changes to work arrangements conducive to improved workplace performance have occurred. These include increased flexibility related to rostered days off, reduced incidence of one-in-all-in overtime and use of staggered times for breaks, starting and finishing work.

## 5.1 Work hours

Work hours in the building and construction industry are higher than the economy-wide average. Both the proportion of workers who work overtime and the amount of overtime each works are higher than the national averages (ABS 1998d).

Workplace level information collected for this study suggests that hours worked on large capital city building sites are characterised by ten hour weekdays and six day weeks. Provision for regular rostered days off (RDOs) are also a feature of the conditions of employment for employees working on these sites.

### Hours worked

As noted in chapter 2, full-time subcontractor employees form the majority of employees on large capital city building sites. It is common for these employees to work between 50 and 58 hours per week. This is made up of around 10 hours each weekday and up to 8 hours on Saturday. Such hours can apply to employees irrespective of their specialist occupation.

#### *Ordinary hours*

Most of the building and construction awards specify a 38 ordinary hours a week arrangement (ordinary hours are those paid at the standard rates of pay, that is, those hours that do not attract overtime or penalty rates). This includes the main building

and construction award — the *National Building and Construction Industry Award 1990* (NBCIA 1990) — and most other relevant federal and state awards. Enterprise agreements are generally silent on the level of weekly ordinary hours, therefore the awards' 38 ordinary hours provisions apply.

In 1982, the then main industry award was altered to reduce ordinary hours from 40 to 38 each week. However, instead of shortening each working day, this reduction in hours was achieved through the introduction of RDOs. Under this arrangement, for every eight hours of ordinary time worked each day, 24 minutes (0.4 of an hour) accrue as an entitlement towards taking every twentieth weekday off. Provision for RDOs are included in all the main state and federal building awards.

While the 38 ordinary hour a week arrangement forms the basis under which most subcontractor employees on large capital city building sites operate, different arrangements apply for those working on shopping centre sites in Victoria and Western Australia. On these sites, ordinary hours are 36 per week. This arrangement translates to an additional day off in a four week cycle (discussed further in the section on RDOs).

The number of ordinary hours per weekday for most employees on large capital city building sites is eight. Thus, a 58 hour week is made up of 40 ordinary hours plus 18 hours of overtime.

Over recent years, some head contractors have developed alternative options relating to ordinary weekly hours for their employees. For example, the New South Wales Multiplex-CFMEU 1996–99 enterprise agreement provides for New South Wales Multiplex employees to work a 50 ordinary hour week (New South Wales Enterprise Agreement Multiplex Constructions Pty Ltd 1996–99, c. 23). As part of this arrangement, the standard eight ordinary hours arrangement is not used. Rather, Multiplex employees can work between 8 and 12 hours a day, between 6 am and 9 pm, on any day of the week subject to an average of 50 hours per week. To compensate for no overtime pay for the ten hours worked over and above the forty hours a week mark (as in the award pay rate system), all 50 hours are paid at a rate slightly higher than the ordinary hourly rate.

Part-time work under the NBCIA 1990 is limited to situations where a person is returning from parental leave. The actual ordinary hours of part-time work for each employee are arranged by mutual agreement of the employer and the employee. Part-time work does not appear to be common on large capital city building sites.

In some states there may also be different arrangements for particular trades. For example, the Victorian electrical trades pattern agreement provides for the possibility of 12 hour shifts. Ordinary time not exceeding 12 hours on any day may

be worked subject to conditions including suitable rostering arrangements and WHS concerns being met (NECA-ETU pattern agreement 1997–2000, p. 11). However, it appears that this arrangement is rarely used by electrical subcontractors on large capital city building sites in Victoria.

The New South Wales electrical trades pattern agreement also incorporates flexibilities concerning ordinary hour arrangements. The agreement states:

> The parties agree that the current working arrangements for hours of work provisions (including, but not limited to, the daily maximum ordinary hours, ... ) may be altered during the life of this Agreement following consultation and agreement between the Company and the majority of affected site personnel so as to provide greater flexibility and to meet project and/or shift work or operational requirements. (New South Wales NECA-ETU pattern agreement 1998–99, c. 13)

There are other less common ways ordinary hours may be worked. For example, elevator subcontractor Otis Elevator Company Pty Ltd has its employees working a four day work cycle where the 38 hour week is made up of four continuous days of 9.5 ordinary hours (Otis Australia - New South Wales Construction & Service Employees Certified Agreement 1997, c. 14).

### *Overtime*

According to ABS data, the average weekly paid overtime for employees in building and construction who undertook paid overtime was around 9 hours in 1997-98 (ABS 1998d). Information obtained for this study suggests many employees on large capital city sites work between 10 to 18 hours of overtime a week. The high levels of overtime may be partly driven by relatively high on-costs (see chapter 6). This provides an incentive for employers to have their employees work additional overtime rather than employ additional persons.

However, the actual number of hours of overtime worked in a particular week can vary. This can be partly due to the sequential (and interdependent) nature of production on building sites. It may be impractical for subcontractors to work a lot of overtime at certain stages of the project. In addition, not all employees choose to work all overtime when offered. Visits to several building sites revealed that some project managers may arrange the construction timetable so that the structural trades do relatively more overtime work than the finishing trades. By 'pushing' the finishing trades less, such strategic scheduling reduces the risk of poorer quality finishing work being done by, for example, painters applying one less coat of paint.

Nevertheless, it appears that most employees on large capital city building sites want to work as much overtime as possible because of uncertainty about future work. Concerns about the quality of life of workers, site safety and maintaining high levels

of productivity act as a constraint on this. As a result, subcontractor employees rarely work more than 58 hours a week for extended periods. This tends to be an industry-wide informal arrangement. As stated by the Queensland Builders Labourer Federation assistant state secretary Terry McIntyre:

> ... construction workers — both labourers and tradespeople — had set an unofficial weekly overtime limit at 58 hours [a weekly hours limit], although many often worked over that mark. (*Courier Mail*, 20 January 1999, p. 9)

Information gathered during visits to several building sites suggests that occasionally more than eighteen hours overtime gets worked. This is often done to catch up to schedule timetables after periods of inclement weather.

The practice of one-in-all-in overtime was common on large capital city building sites in Sydney and Melbourne in the late 1980s (chapter 2). Information provided in responses to the research issues brief and from industry consultations indicates that this practice no longer operates. Rather, overtime appears to be worked by a particular gang of workers in response to the need to meet a particular deadline.

Subcontractors and head contractors without alternative ordinary hour arrangements pay weekday and weekend overtime rates as specified in the awards. The main building awards prescribe the first two hours of overtime to be paid at 1.5 times the ordinary hourly rate and double time thereafter (or some close variation to this). Weekend overtime rates are mostly 1.5 times the ordinary rate for the first two or three hours and then double time. All work after 12 am Saturday and all Sunday work is paid at double time rates.

Provisions concerning overtime in building and construction pattern agreements tend to focus on arrangements banning the practice of one-in-all-in overtime or on the equitable sharing of overtime. There are no formal restrictions either on selecting those to work overtime, or on the amount of this overtime.

Information provided to the Commission indicates most subcontractors try to evenly distribute overtime — or at least try to evenly distribute the opportunity to work overtime — among their employees. However, the Commission found some evidence of subcontractors operating reward based systems where overtime was more likely to be offered to employees who are considered to be the most productive.

## Spread of ordinary hours

The NBCIA 1990 provides for ordinary hours to be worked between 7 am (6 am in Queensland) and 7 pm. Starts of 6 am (5 am in Queensland) are allowed if agreed to

between the employer, employees and the appropriate union. Most other parent awards applicable to building and construction have spreads of hours similar to the NBCIA 1990. For example, the three main plumbing awards prescribe ordinary hours of 7 am to 6 pm, the *National Electrical, Electronic and Communications Contracting Industry Award 1998* (NEECCIA 1998) prescribes the same spread of hours for Victoria and Tasmania, and 6 am to 7 pm for South Australia.

Pattern agreements can provide for employees to start ordinary hours earlier or finish later than the times prescribed in awards. For example, the Victorian MBA-CFMEU 1997–99 pattern agreement, contains some flexibility for variation in the spread of ordinary hours, depending on project requirements and agreement between the employer and the union.

However, while such agreements can contain clauses allowing variation of spreads of hours, the degree of flexibility in practice may be limited. Inflexibility may arise through project agreements, or through custom and practice which dictates a 'normal' start and finish time beyond which hours are worked at overtime rates. This can have cost and productivity implications. With all subcontractors working the same spread of hours, workplaces can become crowded with adverse effects on productivity. For example:

> ... it is possible to have a tiler, electrician, plumber and joiner all working in one room that is already half occupied with a couple of metres of sand and other materials. (Ralph M. Lee Pty Ltd, Response 5, p. 6)

Crowded workplaces may force some specialist subcontractors to try to do much of their work outside the spread of ordinary hours with higher labour costs as a result. One response to the issues brief question 'Do specified hours of work affect productivity and costs?' was:

> Yes. Many of the specialised coatings which our members apply and some of the application processes require sole occupancy of the work area. Therefore work is often carried out outside 'working hours'. (MPA, Response 27, p.1)

However, on a well managed site effective coordination of trades can minimise over-crowding and consequent inefficiency. This can be achieved by allocating the various trades (for example, painters and electricians) to work in different sections of the project concurrently, rather than in the same area.

## Arrangements relating to breaks, starting and finishing work

Within the work day during ordinary hours the building awards generally provide for a ten minute morning paid break and half an hour unpaid for lunch. There are also entitlements for additional short breaks when working overtime or doing shift

work. In his survey of 25 commercial building projects in Sydney, Melbourne and Brisbane in 1987, Ireland (1988) found high levels of paid non-working time associated with lunch and other breaks, late starts and early finishing times.

Information gathered during visits to several building sites and other consultations suggests that the inefficiencies associated with lunch and other breaks and starting and finishing times have fallen considerably. Much of the lost time involved with the breaks arose through employees waiting in queues for lifts or hoists to get to amenity areas. Staggered breaks are now often used to overcome this problem, especially on projects with a large workforce. Staggered start and finish times to avoid bottlenecks around lifts and hoists at the start and end of the day may also be used. The New South Wales electrical trade pattern agreement formally provides for these arrangements. Some project agreements applying to sites visited for this study also provided for staggered breaks.

## Shift work arrangements

Shift work is provided for in each main building award. Most pattern agreements of subcontractors working on large capital city building sites are silent on shift arrangements, therefore the relevant awards' provisions apply.

Shift work rates vary depending on when the shifts finish. For example, in the NBCIA 1990, shifts categorised to be morning shifts (finish between 12.30 pm and 2 pm) and early afternoon shifts (finish between 7 pm and 9 pm) incur shift rate loadings of 25 per cent, while afternoon shifts (finish between 9 pm and 11 pm) and night shifts (finish between 11 pm and 7 am) incur loadings of 50 per cent.

Second shifts on a large capital city building site appear relatively rare. They can occur as a result of a number of project specific circumstances. If the client requires a project to be fast tracked, night shifts may be scheduled for a significant portion of the project. If a project falls behind schedule because of inclement weather, the project manager may direct additional shifts to be undertaken for certain tasks until internal program deadlines are achieved if they cannot be met through additional overtime. One possible constraint on the amount of shift work that may be conducted on a site can come from local council regulations related to noise that restrict hours — especially at night — available for building work. Building sites near residential areas are more likely to face such restrictions.

## Rostered days off

RDOs were introduced into the building industry in the early 1980s via the building awards as a mechanism to achieve a 38 ordinary hour week. There are both advantages and disadvantages associated with RDOs in this industry.

Given that employees tend to work a six day week on large capital city building projects, having a non-work day attached to one in four weekends is beneficial. RDOs provide greater opportunities for employees to pursue family and leisure interests, organise and attend appointments with the dentist or bank for example, or to rest. To the extent that employees are less tired and prone to accidents, and consequently more productive, employers also benefit. RDOs may also help in attracting better quality workers to the industry.

However, by operating with RDOs, the industry 'loses' what would otherwise be productive work days. While this can adversely affect timeliness, increased flexibilities associated with the use of RDOs can ameliorate this impact (see following discussion). Additional costs to contractors (in the form of penalty rates for Saturday work) are incurred if employees work the RDO without another day off in lieu. Rostered days off also results in expensive capital equipment for some contractors lying idle.

All major building awards allow for RDOs. On projects where the 38 ordinary hour week applies, this translates to thirteen RDOs a year. The days set aside each year as industry-wide RDOs are agreed upon in advance at the state level by employers and unions. RDOs are traditionally set on the fourth Monday in a cycle unless it is a public holiday, in which case the RDO tends to be taken on the Tuesday.

The initial RDO arrangements in the main industry award provided little scope for changing RDO days at a company level to accommodate project requirements (or for other reasons). In 1987 this award was altered to allow the RDO to be varied within the cycle subject to written agreement between an employer and one or more employees seven days in advance, and written notification to the relevant union. Most other main building awards now also provide for substitution of RDO days if written agreement is reached with seven days notice between the employer and employees.

With few exceptions, current pattern agreements in the building and construction industry have clauses incorporating further flexibilities in the application of RDOs. One of the more common clauses provides for subcontractors to stagger the employee take up of RDOs over a number of days in order to keep their operations going. Some enterprise agreements provide for employees to 'bank' or accrue their RDOs — usually to a maximum of three or five — which are used, often

consecutively, at the end of projects or attached to annual leave. These additional flexibilities can be supported by clauses in project agreements and industry wide agreements, such as the Queensland Statement of Intent.

Allowance for greater flexibility of RDOs in an award or enterprise agreement does not, however, guarantee the existence of this flexibility in practice. A number of responses to the issues brief complained that while there were clauses providing for the substituting of RDOs in enterprise agreements and awards, there have been times when unions have not agreed to an alternative RDO. Information gathered in consultations with interested parties, visits to building sites and responses to the research issues brief indicates that RDOs on Sydney and Brisbane building sites are more flexible than in Melbourne.

In the early 1990s, there was some evidence of employees refusing to work on the Saturday prior to an RDO in Western Australia and Victoria (Lovell 1993). This would have had an adverse effect on timeliness and costs. Discussions for this study with industry participants suggested that, in general, the practice of taking off the Saturday prior to a RDO is far less prevalent than in the past. There are currently few large construction projects in progress in Perth, so it is difficult to establish whether this practice will be a feature of projects planned for the near future. The Master Plumbers and Mechanical Services Association of Australia argue, mainly in reference to the plumbing sector in Victoria, that the practice of not working on the Saturday before an RDO continues to be observed, albeit less vigilantly (MPMSAA, Response 41, p. 2). However, the Queensland Master Builders' Association (QMBA) stated that 'there is no pattern in Queensland of not working the Saturday prior to a Rostered Day Off' (QMBA, Response 43, p. 3).

As noted earlier, large shopping centre sites in Victoria and Western Australia operate under a 36 ordinary hour a week arrangement. This translates to an entitlement of two RDOs every four weeks compared to the one RDO every four weeks in the common 38 hour week arrangement. There has been a tendency in Victoria for the unions to claim this arrangement on any large site with a retail component (DEWRSB, Response 39, p. 11). Entitlement to two days off in a four week cycle as part of a 38 hour week arrangement was recently used on the Docklands Stadium project. The extra day of leave was in lieu of receiving payment for some overtime. The recent agreement struck at the Federation Square project in Melbourne also involves an additional leave arrangement, this time in lieu of receiving a productivity allowance.

Information provided to the Commission suggests that total hours worked by employees over a four week cycle on 36 ordinary hour a week sites are equivalent to what would be worked under a 38 hour arrangement despite employees taking two RDOs per cycle. In effect, there is a shift to more of the total hours being paid at

overtime rates. Additionally, in Victoria the hourly pay rates under the 36 hour week arrangement are higher than those specified for the 38 hour week arrangement (MBAV, Response 42, p. 20). The higher hourly pay rates for the 36 hour week arrangement are paid largely as a result of custom and practice. Both the greater proportion of hours being paid at overtime rates and the higher hourly rates work to increase unit labour costs.

A wider use of arrangements providing for an extra day off every four weeks (as part of a 36 hour week or other arrangement) is being pursued by the ETU in Victoria (Pratley 1999). The 36 hour week or additional leave arrangements such as those described above do not operate on large building sites in Sydney or Brisbane.

## 5.2 Types of employment

### Daily and weekly hire contracts of employment

Most workers on large capital city building sites are employed under either a daily or weekly hire contract of employment. Tradespersons and labourers are usually employed under daily hire contracts of employment. These are specified in enterprise agreements using conditions carried over from the relevant award. Electricians and machine operators (including crane operators) are usually employed under weekly hire arrangements.

Under the daily and weekly hire arrangements, notice periods for termination of employment are one day and one week respectively for the first year of employment. After one year of employment, notice periods for termination of employment of weekly hire employees increase depending on length of service (discussed further in section 5.3). Many employees operating under these arrangements are in ongoing, long term employment arrangements with their employer. Daily and weekly hire employees also accrue the 'normal' employment entitlements such as annual leave, long service leave, sick leave and superannuation.

### Monthly hire contracts of employment

Head contractor non-managerial employees have traditionally been employed under weekly hire arrangements. More recent rounds of enterprise agreements have seen some head contractors offer monthly hire contracts to these employees. These contracts, which extend the length of notice period to one month, may also contain arrangements such as a wider spread of ordinary hours or profit sharing programs (see section 6.4). However, head contractor workforces represent only a small

proportion of the total number of employees working on large capital city building sites. Thus, these developments represent an innovative but not widespread arrangement.

## Casual hire contracts of employment

Some workers on large capital building sites are on casual hire contracts of employment. These contracts are provided for in each of the main building awards. However, the QMBA argue that in Brisbane:

> The commercial sector does not have a high usage of casual contracts of employment, except in short term intensive activities such as concreting. (QMBA, Response 43, p. 3)

Head contractors' enterprise agreements and most subcontractor pattern agreements are generally silent on casual hire. Consequently, persons employed by contractors on casual hire contracts operate mainly under conditions of the parent award. These persons are sometimes known as 'direct casuals' because they are employed directly by a contractor.

However, the awards set restrictions (some more restrictive than others) on the period persons can be engaged under these contracts before requiring the persons to be moved to one of the daily or weekly hire contracts. The length of this period depends on the occupation of the casual employee, ranging from less than five days to twelve weeks.

The NBCIA 1990 limits the engagement of tradespersons and labourers on casual contracts to less than five days (which is generally interpreted to mean a maximum of four days). For any longer period of employment they must be moved to a daily hire contract of employment. Master Builders Australia Inc. argue that the unions have additionally interpreted the four day maximum clause to mean that it applies to the employee and not to any individual period of engagement:

> There is a further restriction, not necessarily accepted by the MBA but argued for by the union, that once having been engaged for a maximum period of four days casual employment an employee cannot be re-engaged as a casual by that employer. (MBA Inc., Response 32, p. 4)

Under the NBCIA 1990 provisions, machine operators on casual contracts are limited to a maximum of two weeks continuous employment. For longer periods of employment machine operators must be moved to a weekly hire contract of employment. There is a further award restriction that if the employer terminates their casual employment, they cannot be re-hired as a casual for at least a month. These restrictions, especially the additional union imposed restriction, appear to be inappropriate for what is a legitimate source of alternative labour.

Longer periods of continuous employment of casuals are possible under the electrical awards and the various plumbing awards. The NEECCIA 1998 allows casuals to be employed for a continuous period of up to eight weeks. Any break in employment for a day leads to the period of continuous employment being calculated to re-start from that day. The Queensland electrical award allows for casual employment under equivalent conditions, except it is six weeks rather than eight weeks. The New South Wales electrical award provides for a maximum of two weeks continuous casual employment, but can be altered by mutual agreement between the employer and employee.

Recent award simplification decisions relating to the use of casuals for the various plumbing awards have extended the allowable period of continuous employment of casuals to twelve weeks. The decisions also allow an extension beyond twelve weeks of engagement by agreement between the employer and the employee (AIRC 1998).

Persons employed on casual contracts of employment are paid, in most cases, the same hourly rate as a permanent employee in the same occupational classification plus a loading of twenty per cent. The loadings are mainly intended to be in lieu of all paid leave and public holidays. Awards also specify minimum payments for part day casual hire engagement of either three or four hours pay. Under the terms of pattern agreements, casual hire employees also accrue redundancy and superannuation employer payments into individual accounts in central funds.

## Use of labour hire companies

While no precise data are available, it appears that the use of labour hire companies for supplementary labour is a feature of many large capital city building projects. On such projects, labour hire companies are principally involved in supplying labour to meet short term requirements. In a few cases, labour is supplied for the length of a project.

In general, two types of labour hire companies supply labour to the building and construction industry. Some companies are agencies that act as an intermediary between clients who need labour and the agency's self-employed contractors who supply that labour. However, it would appear that the labour hire companies used on large capital city building sites are those who have their own employees. These employees are on either casual or daily/weekly hire contracts of employment in accordance with the labour hire company's enterprise agreement and parent award. The parent award of the company is one of the main building awards and is determined by the employees' occupation, as for contractor employees.

These labour hire companies generally have a union signatory to their enterprise agreement (or at least, match as a minimum, the wages and benefits of employees of the contractor who hires them). In Victoria, the VBIA states that 'the parties agree to monitor the activities of labour hire contractors in the building industry and their compliance to this agreement' (c. 2.6.7). In New South Wales, there is no equivalent industry agreement, but clauses in pattern agreements may ban the use of labour hire companies that do not have a union endorsed enterprise agreement. For example, the New South Wales electrical trade pattern agreement has such a clause. Union labour hire pattern agreements for employees in occupations covered by the NBCIA 1990 are used by prominent labour hire companies in New South Wales.

Labour hire pattern agreements generally discourage employing persons on casual contracts of employment in preference to daily or weekly hire contracts. For example, the Victorian CFMEU labour hire pattern agreement states that 'the preference is that no employees be employed on a casual basis' (c. 14.2). Information gathered as part of the research process indicates that despite such clauses in agreements, the proportion of employees on casual contracts compared with the daily/weekly hire contracts varies considerably between labour hire companies.

Both head contractors and various, though not all, subcontractors operating on large capital city building sites utilise labour hire company employees at certain times. Head contractors typically engage labour hire employees for jobs on site that fall outside or between specialist subcontractor tasks, such as general labouring, materials delivery and clean up.

Subcontractors mainly engage labour hire workers to supplement their on-site permanent employees for short periods when behind schedule, to replace employees absent because of sick or annual leave, or for peak periods of work. Although not common, a few subcontractors have a sizeable proportion of their workforce on a site sourced from labour hire companies. For example, a formwork subcontractor on a site visited for this study had approximately half of its workforce made up of labour hire persons. However, some subcontractor enterprise agreements have clauses that limit the use of labour hire people for anything but peak periods of work. For example, the Queensland painters pattern agreement states:

> Supplementary Labour - may be sourced so as to top up the company's permanent workforce, but only so as to meet short term peak requirements on individual sites. (QLD MPA pattern agreement, c. 2.1(viii))

In June 1999, the CFMEU announced a campaign aimed at preventing labour hire employees from being used in a range of occupations on large building sites. These include first aid attendant positions, job delegates/shop stewards, hoist drivers and

crane crew. More generally, the campaign aims at minimising the use of labour hire workers in the industry.

Contractors at building sites visited for this study indicated that one of the attractions of using labour hire employees is that they pay the labour hire company an all-in payment. This is administratively easier for contractors to handle than employing direct casuals.

However, there are a number of reasons why contractors might limit their use of labour hire employees, even when their enterprise agreement provides considerable scope for them to be used.

First, a contractor's (either head contractor or subcontractor) personnel policy might strongly promote (as much as economically viable) long term permanent employment for its workforce in order to encourage commitment to the company. A significant use of labour hire persons to the detriment of permanent positions may reduce morale among employees, with adverse consequences for productivity (Stewart 1992).

Second, short term labour requirements on a site can, in the case of larger contractors, be met by moving employees from site to site as required. Related to this, an employer association informed the Commission of an informal labour sharing arrangement operating between a small number of subcontractors in a particular trade in one state, thus dispensing with the need for labour hire companies. Pattern bargaining resulting in approximately the same wages and conditions between subcontractors has facilitated this arrangement.

Third, supply considerations may reduce the extent to which labour hire persons might be used on sites. Some subcontractors indicated that labour hire employees provided for the less skilled tasks on large capital city building sites can be unsuitable for the physical nature of the work. Subcontractors also expressed reservations about an extensive use of labour hire personnel because a degree of on-site training may be required before they are fully productive and also because the persons supplied can be inexperienced and more prone to accidents on site.

Employees of labour hire companies can effectively have greater security of employment than employees of subcontractors, or at least, have less down time between jobs, as they are not reliant on a subcontractor's ability to win tenders for their employment. This is subject, however, to the ability of the particular labour hire company to attract work for its employees.

## Pyramid subcontracting

In the 1970s and early 1980s, head contractors sought to realise the gains from specialisation in the commercial sector of building and construction by moving to greater levels of subcontracting. This facilitated the growth of pyramid subcontracting, which involved parcels of work won in tenders by subcontractors being further contracted out.

However, industry concerns arose with pyramid subcontracting for reasons including the increased use of artificial labour-only contractor arrangements designed to avoid legal responsibilities with respect to employee on-costs and increased use of cash-in-hand payments designed to avoid legally required tax payments by both employers and employees. There were also concerns about the poor occupational health and safety practices associated with some labour-only contractors (see for example Building Industry Investigation Committee 1983).

These industry concerns led to a national agreement between building unions and a number of employer associations to ban pyramid subcontracting on commercial building sites. This was approved by the Australian Conciliation and Arbitration Commission as part of the building industry 'second tier' wage package in 1987 (Underhill 1991). Today, under clauses in a number of the pattern agreements, and also the VBIA, most forms of pyramid subcontracting are banned except where it involves subcontractors contracting out specialised tasks that they do not have the skills to undertake. For example, the clause banning pyramid subcontracting in the Queensland painters pattern agreement states:

> Pyramid sub-contracting will not be undertaken in any form as it is detrimental to both the building industry and employees. Pyramid sub-contracting is defined as sub-contracting out parcels of work already contracted to the company that could reasonably have been expected to have been undertaken by the company and is within the normal scope of work undertaken by the company. This clause shall not apply to prevent the company sub-letting specialised work outside of the normal scope of work which the company performs. (Qld MPA pattern agreement, c. 2.5)

Information provided to the Commission indicates that bans on pyramid subcontracting are more stringently applied and/or widespread in Melbourne and Sydney than in Brisbane. According to the QMBA, there are limited industrial impediments to pyramid subcontracting in Brisbane (QMBA, Response 43, p. 3).

From an economic perspective, to the extent that pyramid subcontracting would occur with bona-fide subcontractor companies and labour-only contractors who pay appropriate tax, honour their on-cost liabilities, and operate according to legislated safety standards, there may be additional efficiencies available to the industry. Pyramid subcontracting would allow subcontractors to contract pieces of work won

by tender into smaller, more specialised parcels of work that perhaps could be more efficiently undertaken (and with greater quality and timeliness and less cost) by other contractors, including self-employed contractors.

It is not clear that the limit on pyramid subcontracting is appropriate to achieve outcomes such as a reduction in the existence of labour-only contractors with poor workplace health and safety practices, given the gains to the industry that may be available if subcontractors were able to engage in further subcontracting.

Given the structure, size and interdependence of a large capital city building site, however, there could be a practical limit to the extent of pyramid subcontracting from the point of view of site coordination. Head contractors may find it more efficient to coordinate and sequence the activities of fewer but larger subcontractors. The Commission's view is that the extent of pyramid subcontracting should be at the discretion of the head contractor, which has ultimate responsibility for the project.

## 5.3 Recruitment, termination and redundancy

### Recruitment

The recruitment process for contractors on large capital city building projects has common elements across subcontractors and head contractors. Generally, this involves 'word of mouth' notification of vacancies (or, less frequently, advertisement in the press), a screening process based on a skills assessment and interviews, and probationary periods. However, as the main industry awards generally do not contain provisions relating to recruitment, and neither do most pattern agreements, the particular recruitment arrangements each contractor uses are driven by individual preferences. One exception to this is the length of probationary periods applied by subcontractors. Depending on the relevant pattern agreement, the probationary period may be as little as two weeks or up to three months.

Head contractors tend to apply more rigorous formal recruitment processes than many types of subcontractors, probably reflecting the greater resources they can devote to the process. Advertisement is more likely to be through the press, prospective employees may face several interviews by a panel from the company, formal selection criteria are applied, and probationary periods where their skills and work attitude are assessed are also used. Only engineering subcontractors with less transient workforces, for example, those involved in electrical, air conditioning, fire protection, lifts and security systems, may have recruitment practices on par with the head contractors.

The recruitment process for the structural and finishing trade subcontractors is generally less rigorous. Discussions with subcontractors suggest that most of them advertise by word of mouth. Advertisement in the press usually only occurs if subcontractors expect an insufficient number of applicants from informal processes and so need to advertise more widely. This can occur, for example, in times of skill shortages due to high levels of building activity.

Overall, consultations with interested parties suggested greater care is being taken now compared with five or ten years ago to ensure persons recruited have the appropriate skills.

## Termination of employment arrangements

The daily hire provisions of the NBCIA 1990 allow an employer (or employee) to terminate employment at one day's notice if employed on a daily hire contract of employment. The major plumbing awards also have daily hire arrangements with notice periods of termination of one day. These notice periods do not vary with length of service.

The weekly hire provision of the NBCIA 1990 requires an employer (or employee) to give one week's notice or one week's pay (or to forfeit a week's pay) in lieu if employed on a weekly hire contract of employment. This notice period does not vary with length of service. However, the *Workplace Relations Act 1996* (WRA 1996) overrides the award provision to the extent that it prescribes a longer period of notice by employers as the length of service increases after one year of continuous employment (equivalent notice periods by employers for daily hire employees are excluded from the WRA 1996 requirements by force of regulations made pursuant to the Act). The notice periods rise to a minimum of four weeks for employees who have been continuously engaged for more than five years. As well, employees over 45 years of age and with more than two years continuous service get an extra week's notice.

The notice periods for termination of employment by employers for weekly hire employees prescribed in electrical awards are similar to those in the WRA 1996. Under provisions in these awards employees also are required to give similar notice periods. Termination of employment for reasons of technological change in the New South Wales electrical award is the only exception to these arrangements. In this instance an employer must provide a notice period of three months to the employee. The electrical awards also provide for one day off each week of the notice period without loss of pay for the purpose of seeking other employment.

The termination provisions of all the building awards also include clauses in relation to unfair dismissal, in addition to unfair dismissal provisions in the WRA 1996 and state legislation. The clauses state that termination of employment by an employer shall not be harsh, unjust or unreasonable (where this is defined as termination on one of a number of grounds including race, colour, gender, marital status or family responsibilities).

Most pattern agreements are silent on arrangements in relation to termination of employment, although some enterprise agreements provide for longer notice periods than those specified in the relevant award.

In practice, employees often get considerably longer notice of termination than prescribed in the awards, agreements or WRA 1996, albeit of a more informal nature. Up to six months before a contractor finishes work on a site, the contractor and employees may begin having discussions over the prospects of further work.

## Procedures for selecting employees for redundancy

Procedures for selecting employees for redundancy, are in general only relevant in circumstances of *employer*-initiated termination of employment of at least one core or 'long term' employee. The redundancy selection procedures also only apply to a subset of these cases. Often, some employees of a contractor are employed (on either daily or weekly hire contracts of employment) to supplement the contractors' core employees with the understanding between both parties that their employment is only for the duration of the project. This 'understanding' may be formally expressed in pattern agreements. For example, 'The Company's right to employ persons on a specified task and/or specified period basis is acknowledged' (New South Wales NECA-ETU pattern agreement — Sydney (County of Cumberland) — 5.11.97, c. 10.c, p. 3).

The procedures to be followed in circumstances of possible redundancies vary depending on the agreement or award to which the contractor is a party. The state electrical awards require the employer to undertake discussions with the employees and their union on 'the means to avert or mitigate the adverse effects of such changes on employees' (Queensland Electrical Contracting Industry Award 1992, c. 2-2, 2 (b)). Consultation procedures are also included in some redundancy provisions of pattern agreements. Depending on the agreement, the issues highlighted to be discussed in consultations include alternatives to retrenchment and the timing of redundancies.

Most subcontractor pattern agreements do not have provisions on the selection criteria to be applied when selecting employees for redundancy. Head contractor

agreements are more likely to have such provisions. Where selection criteria are listed in agreements, seniority or length of service is usually not a consideration. However, this can be relevant if employees are equal in terms of skills, experience and classification. For example, the Victorian 1997–99 MBA-CFMEU pattern agreement states:

> **Employment & Termination**
> Subject to the terms and conditions of the National Building and Construction Industry Award 1990, it is agreed that it is the employer's prerogative to determine the order of selection of employees for employment or retrenchment subject always to the following:
> i) All relevant legislation governing unfair dismissal, discrimination, etc. will be observed.
> ii) Voluntary terminations will be encouraged as a first step.
> iii) The seniority of employees - within classification, experience or skills held - will be considered by the employer in selecting employees for retrenchment.
> iv) The Grievance Procedures of Clause 5.2 of the Enterprise Agreement will apply in the event of any concerns arising regarding retrenchments. (Victorian CFMEU pattern agreement, 1997–99, c. 7.4)

Information gathered in industry consultations and visits to building sites suggests that the practice of last-on-first-off does not operate on large capital city building sites.

## 5.4 Performance effects

Demand for labour on large capital city building sites is variable both because of the building cycle and because of the sequenced stages, and associated skill needs, of a building project. In addition, demand for labour can vary because of factors such as inclement weather or changes to timetables.

Employer flexibility in adjusting both workforce size and working hours becomes crucially important under such pressures. In this context, it would appear that most aspects of the work arrangements discussed in this chapter seem to be flexible enough to accommodate the volatility of demand for labour associated with large capital city building work.

For example, the recruitment processes and the notice periods for termination of employment appear to provide sufficient flexibility for contractors to adjust the daily and weekly hire workforce as required. Also, for most subcontractors on a site, in most circumstances, the 38 ordinary hour a week plus overtime arrangement within the regular span of hours, affords sufficient scope for a subcontractor to fulfil its contract without unduly limiting performance.

Ideally, arrangements relating to the usage of labour on large capital city sites also need to reflect the interdependency that exists between various subcontractors on a site. That is, the need for flexibility in work arrangements for each individual contractor needs to be counterbalanced by the need for arrangements that do not discourage cooperation between the contractors. Otherwise, performance would be adversely affected. Coincidence in hours worked (uniformity in the spread of ordinary hours between subcontractors) generally facilitates such cooperation. Also, a degree of uniformity in the core hours across subcontractors assists head contractors in planning and sequencing tasks.

Information provided to the Commission indicates that the practice of one-in-all-in overtime no longer operates on large capital city building sites. This change is likely to increase labour productivity by reducing excessive manning during overtime. Unit labour costs fall for the same reason (table 5.1).

Table 5.1 **Direct effects of work hours and hiring arrangements on workplace performance**

| | *Labour productivity*[a] | *Unit labour cost*[b] | *Timeliness* | *Product quality* |
|---|---|---|---|---|
| Removal of one-in-all-in overtime | ↑ | ↓ | - | - |
| Flexible RDOs | ↑ | ↓ | ↑ | - |
| 36 hour week arrangements | - | ↑ | - | - |
| Notice of termination provisions | ↑ | ↓ | - | - |
| Bans on pyramid subcontracting | ↓ | ↑ | ↓ | ↓ |
| Constraints on use of labour hire employees | - | - | ↓ | - |

[a] Output per hour worked. [b] Labour cost per unit of output. ↑ denotes an increase in the partial performance indicator, ↓ denotes a decrease, and - denotes no direct effect or not applicable.

One of the more significant changes on large capital building sites has been the increased flexibility of RDO arrangements in some states. While the taking of RDOs on the prescribed days used to be strictly adhered to, arrangements in New South Wales and Queensland (at least) now allow some flexibility to alter RDOs, or to bank them up to a maximum of five. These modified arrangements provide contractors with greater opportunities to ask particular employees to work on prescribed RDOs to undertake work more safely done when fewer employees are on the site, or to perhaps make up for time lost to inclement weather. This in turn can lead to an increase in labour productivity, a decrease in unit labour cost and an improvement in timeliness.

The 36 hour week arrangement operates on shopping centre sites in Victoria and Western Australia. Information provided to the Commission indicates that total

hours worked per employee over a four week period on these sites are often equivalent to what may be worked on sites operating with the 38 hour week arrangement. Because a greater proportion of the total hours worked are paid at overtime rates, unit labour costs will rise. In Victoria, unit labour costs also rise because of higher hourly rates of pay for the 36 hour week arrangement.

The main building awards provide notice periods for termination of employees for at least the first year of employment, to be one day and one week for daily and weekly hire employees respectively. These notice periods are generally unaltered by enterprise agreements. From an employer viewpoint, the notice periods seem to provide sufficient flexibility to accommodate — what is referred to in the industry — as the ordinary and customary turnover of labour. Partial labour productivity rises if employers are not constrained from releasing employees from their employment when there is little work available. Unit labour costs can fall for the same reason.

As discussed earlier, the current bans on pyramid subcontracting may be limiting the opportunity for parcels of work won in tender being further contracted out and more efficiently undertaken (and with greater quality and timeliness and less cost) by other contractors including self-employed contractors. The Commission's view is that the extent of pyramid subcontracting should be at the discretion of the head contractor, rather than being banned automatically.

Some pattern agreements used by both subcontractors and labour hire companies limit the use of labour hire workers to either peak periods of work, short term tasks or to cover absences of employees on sick or annual leave. Constraints on using labour hire employees for anything but these reasons would affect the performance of a contractor if it is facing a sustained period of high output demand and there are insufficient people that it can directly employ to meet this demand. In such circumstances timeliness would be adversely affected. However, it is unclear if these circumstances arise on large capital city sites with any frequency. What may have greater impact is the restrictions on use of labour hire employees in a range of occupations the CFMEU is seeking to impose as part of a campaign to minimise the use of labour hire companies in the industry.

# 6 Wages and on-costs

This chapter examines the key components of remuneration on large capital city building projects and how they effect workplace performance. Remuneration for employees working on large capital city building projects is based on a complex system of base pay plus allowances derived from awards. Actual levels of remuneration are documented in enterprise, industry and project agreements. The prevalence of pattern bargaining ensures that employees generally receive similar total wage increases over time for comparable skills. However, there are differences across enterprise agreements in how these increases are implemented.

The most notable aspect of on-costs is the existence of portable industry schemes for redundancy, superannuation and long service leave. However, this needs to be considered in the context of the relatively high labour mobility in this sector of building and construction. All on-cost payments, including redundancy, accrue on a weekly basis.

Formal remuneration schemes that differ from the outcomes of pattern bargaining are only common among head contractor employees. Often engaged in strategic tasks, these employees usually have more flexible work arrangements attached to their remuneration packages. Restrictions on self-employment have constrained the adoption of more widespread alternative pay schemes at the subcontractor level.

## 6.1 Direct remuneration

According to ABS industry data, average ordinary time earnings were around $710 per week in building and construction in 1997-98, compared to $715 in other industries. However, building and construction employees also work relatively high levels of overtime (see chapters 2 and 5 for details). In 1997-98, average overtime earnings in building and construction were $95 per week, which was almost double the economy-wide average of $40 per week (ABS 1998a).

Broad industry data can mask significant variations in the components and levels of workers' hourly rates of pay. This is likely in building and construction where employment contracts differ across sectors. In particular, employees are more common in the commercial sector of the industry, whereas self-employment is a feature of the residential sector. Unlike those who are self-employed, employees in

the commercial sector are paid according to complex systems of hourly base rate pay plus allowances that have evolved from awards and industrial negotiation. Ordinary hours of work are paid at the base hourly rate while additional hours worked can attract overtime penalties.

Discussions with interested parties and responses to the research issues brief indicate that employees on large capital city building projects can earn relatively high wages but this is achieved through undertaking relatively high levels of overtime. Overtime earnings are affected by a variety of factors including the level of overtime hours, the penalties attached to those hours and the individual components of remuneration to which overtime penalties apply. Both ordinary hours of work and overtime penalties are specified in building and construction industry awards, and were summarised in chapter 5.

## Awards

Employees under awards in building and construction are paid according to sliding scale relativities based on the remuneration of a skilled tradesperson. In the past ten years, the main source of award increases in base pay has been the series of national wage cases. Thus, base pay increases have generally been similar across all awards. While the composition of award allowances can vary across employees in building and construction (depending on the applicable trade), in aggregate they have generally increased at similar rates under the awards.

### *Worker classifications*

Building and construction minimum weekly wages are specified in awards according to classifications based on skills, duties, training and experience. Minimum weekly wages for each classification are fixed relative to the classification of a standard tradesperson by a sliding scale of relativities (table 6.1). For example, wages for labourers (trades assistants) working under each award have remained around 80 to 85 per cent of the minimum weekly wage paid to an employee with a trades qualification. These award relativities have changed marginally over time as workers received flat rate wage increases through the award system. The only relativities that have remained fixed over time are those for apprentices. The awards do not specify junior rates of pay.

Table 6.1 **Classification margins in selected building and construction industry awards**

| *Electrical worker*[a] | | *Construction worker*[b] | |
|---|---|---|---|
| *Grade* | *Relativity (per cent)* | *Level* | *Relativity (per cent)* |
| 1 | 80 | 1a | 85 |
| 2 | 85 | 1b | 88 |
| 3 | 90 | 1c | 90 |
| 4 | 95 | 1d | 92.4 |
| 5 | 100 | 2 | 96 |
| 6 | 105 | 3 | 100 |
| 7 | 115 | 4 | 105 |
| 8 | 125 | 5 | 110 |
| 9 | 130 | 6 | 115 |
| 10 | 145 | 7 | 120 |
| | | 8 | 125 |

**a** Base tradesperson grade 5. **b** Base tradesperson level 3.

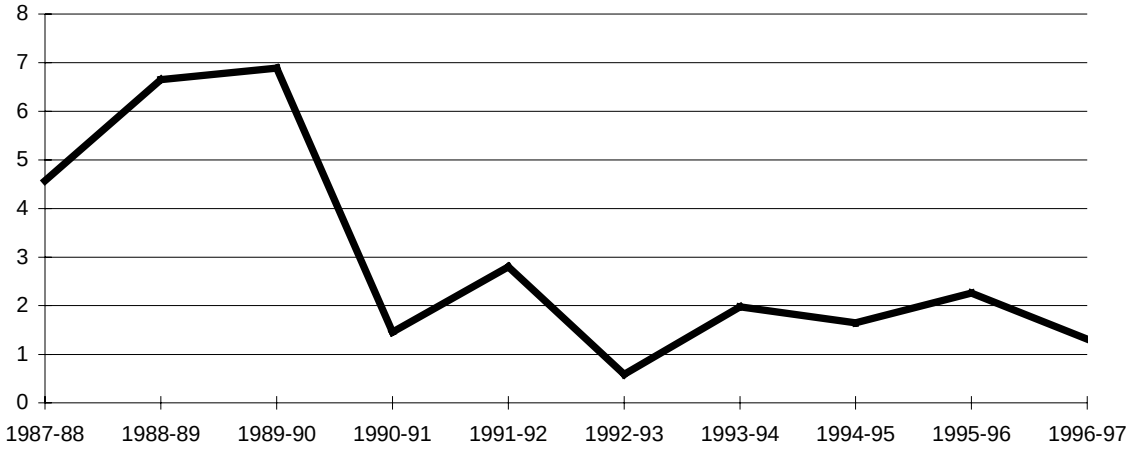
*Sources: National Electrical, Electronic and Communications Contracting Industry Award 1998*; *National Building and Construction Industry Award 1990,* Appendix S.

### *Compositional changes*

Prior to the widespread use of enterprise agreements in building and construction from the early 1990s, awards were the major formal mechanism for changing the wages of employees. However, actual rates of pay on large capital city building projects were usually above those specified in awards (Grimshaw and Smith 1988). In recognition of this, the Australian Conciliation and Arbitration Commission (ACAC) converted federal building awards in the late 1980s and early 1990s from a paid rates to a minimum rates basis. As with other industries, the increased use of enterprise agreements since that time partly explains the fall in base award pay growth since the late 1980s (figure 6.1).

The minimum weekly wage and award weekly allowances combine to form the award base weekly wage for each worker classification (figure 6.2). Examples are given in table 6.2. In 1998, a carpenter working under the *National Building and Construction Industry Award 1990* (NBCIA 1990) received $523.12 per week – the minimum weekly wage of $465.30 plus $57.82 in weekly allowances. Dividing by the standard 38 hour working week, this translated to a base hourly rate of $13.77 per hour.

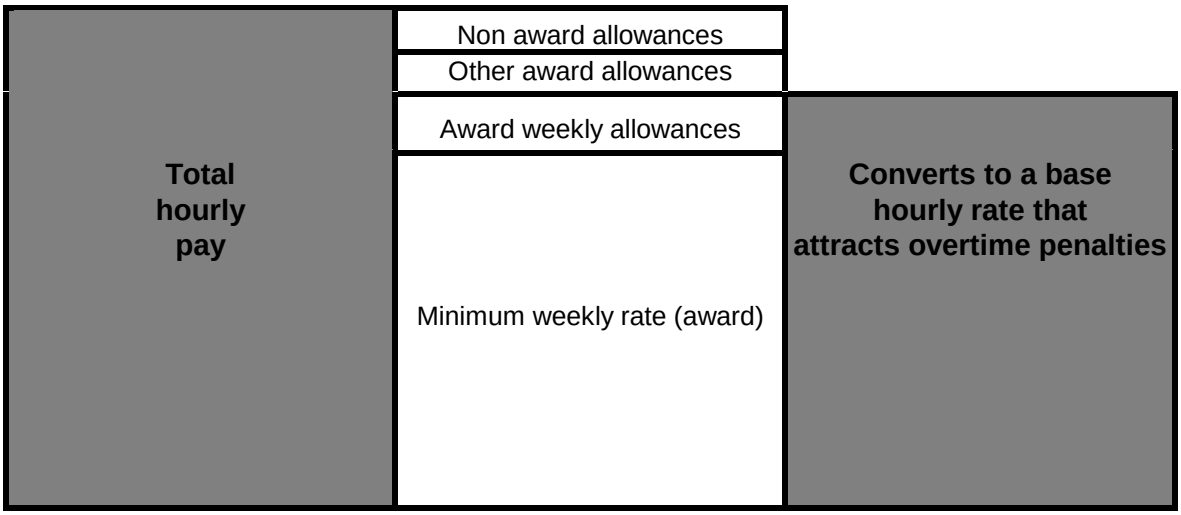
Figure 6.1 **Average annual base pay increase[a] in building and construction, 1987-88 to 1996-97 (per cent)**




**a** Base pay includes award allowances that form base hourly rates.

*Data source:* ABS (*Award Rates of Pay Index*, Cat. no. 6312.0).

Figure 6.2 **Stylised structure of components of employee remuneration on large capital city building projects**




Minimum award weekly wages can vary across awards. For example, in 1998, before the inclusion of allowances, electricians under the Victorian award received $512.20 per week, plumbers in Victoria employed under the *Plumbing Trades (Southern States) Construction Agreement 1999* $468.10 per week, and carpenters under the national award $465.30 per week (table 6.2).

Table 6.2 **Building and construction award weekly wages**

Dollars per week[a]

| | *Carpenter*[b] | | *Plumber*[c] | | *Electrician*[d] | |
|---|---|---|---|---|---|---|
| | *1994* | *1998* | *1994* | *1998* | *1994* | *1998* |
| **Minimum weekly wage** | **417.30** | **465.30** | **420.10** | **468.10** | **464.20** | **512.20** |
| **Award allowances** | **52.72** | **57.82** | **82.79** | **91.28** | **51.20** | **58.90** |
| Special | 7.70 | 7.70 | 7.70 | 7.70 | na | na |
| Follow job | 12.42 | 13.82 | 13.29 | 14.78 | na | na |
| Industry | 15.60 | 17.40 | 15.60 | 17.40 | 15.60 | 17.20 |
| Tool | 17.00 | 18.90 | 17.00 | 18.90 | 12.50 | 13.80 |
| Trade | na | na | 12.50 | 13.90 | na | na |
| Licence | na | na | na | na | 13.30 | 17.10 |
| Attendance | na | na | na | na | 9.80 | 10.80 |
| Registration | na | na | 16.70 | 18.60 | na | na |
| **Base weekly wage** | **470.02** | **523.12** | **502.89** | **559.38** | **515.40** | **571.10** |
| **Base hourly rate** ($/hour) | **12.37** | **13.77** | **13.23** | **14.72** | **13.56** | **15.03** |
| **Average annual change 1994–98**[e] (per cent) | | **2.7** | | **2.7** | | **2.6** |

**a** Based on a 38 hour week wages can be converted to hourly rates. **b** Employed under the *National Building and Construction Industry Award 1990*. **c** Employed under the *Plumbing Trades (Southern States) Construction Agreement 1999*. **d** Employed in Victoria under the *National Electrical, Electronic and Communications Contracting Industry Award 1998.* **e** Compound growth rate. **na** Not applicable.

*Sources:* Various awards; PC estimates.

Under safety net adjustments, award weekly allowances have generally increased at similar rates to minimum weekly wages. Between 1994 and 1998, carpenters, plumbers and electricians experienced annual increases in their base award weekly wages of around 2.7 per cent (table 6.2).

Some allowances are common to all the awards. However, many allowances vary across awards. These can reflect the nature of the relevant employment contract. For example, carpenters and plumbers under daily hire arrangements receive $0.36 and $0.39 per hour respectively as a follow the job allowance to compensate for potential days of unemployment between jobs. Electricians employed on a weekly hire basis do not receive this allowance. Moreover, within individual awards, different classifications can receive allowances reflecting skills or tasks undertaken. For example, some tradespersons receive allowances to compensate for industry licensing and registration requirements.

Awards also specify hourly and weekly allowances that do not attract penalties. They generally include disability allowances to compensate for special work conditions. Increases in these allowances have occurred regularly and at similar percentage rates. Between 1994 and 1998, the NBCIA 1990 hourly disability rates increased on average by around two per cent per year. Specific disability allowances can vary across awards. For example, in the NBCIA 1990 the height allowance for a

particular project is based on the building's number of storeys whereas in the *National Electrical, Electronic and Communications Contracting Industry Award 1998* it is based on its height in metres. Industry consultations revealed that this may lead to different height allowances being paid to employees on the same site.

## Pattern agreements

Employees have negotiated above award safety net increases mainly through pattern agreements. Employees in building and construction covered by federal enterprise agreements certified in the December quarter 1998 received average annual wage increases of 6.7 per cent (DEWRSB 1999). Analysis of pattern agreements for major trades (of which some are state based) reveals some variation around this average. For example, carpenters, plumbers and electricians under the agreements shown in table 6.3 have gained average annual wage increases of 6.3, 8.7 and 5.9 per cent respectively. However, this may underestimate their total change in remuneration since it only accounts for wage changes under pattern agreements and not other sources, such as project agreements.

Table 6.3 **Building and construction pattern agreement wages**

Dollars per week

| | *Carpenter*[a] | | *Plumber*[b] | | *Electrician*[c] | |
|---|---|---|---|---|---|---|
| | 1997 | 1999 | 1997 | 1999 | 1996 | 1999 |
| **Minimum weekly wage** | **ns** | **ns** | **458.42** | **458.42** | **586.1** | **634.00** |
| **Allowances** | **ns** | **ns** | **91.72** | **91.72** | **76.70** | **109.50** |
| Special | ns | ns | 8.09 | 8.09 | na | na |
| Follow job | ns | ns | 16.68 | 16.68 | na | na |
| Industry | ns | ns | 16.71 | 16.71 | 33.00 | 37.50 |
| Tool | ns | ns | 19.02 | 19.02 | 15.80 | 17.00 |
| Trade | ns | ns | 13.35 | 13.35 | na | na |
| Licence | ns | ns | na | na | 15.50 | 25.00 |
| Attendance | ns | ns | na | na | 12.40 | 30.00 |
| Registration | ns | ns | 17.87 | 17.87 | na | na |
| Agreement payments | ns | ns | 59.00 | 169.00 | na | na |
| **Base weekly wage** | **574.94** | **649.80** | **609.14** | **719.14** | **662.80** | **743.50** |
| **Base hourly rate** ($/hour) | **15.13** | **17.10** | **16.03** | **18.92** | **17.44** | **19.57** |
| **Average annual change** (per cent)[d] | | **6.3** | | **8.7** | | **5.9** |

**a** Queensland Statement of Intent. Agreement term January 1997 to December 1999. **b** MPA-CEPU Victorian pattern agreement. Agreement term July 1997 to July 1999. **c** NECA-ETU Victorian pattern agreement. Agreement term October 1996 to March 1999. **d** Compound growth rate over agreement term. **na** Not applicable. **ns** Not specified.

*Sources:* Various agreements; PC estimates.

Changes in the components of remuneration vary between different pattern agreements. This may alter the system of incentives faced by employees and so affect workplace performance. Examples include:

- rolling-in some award specified allowances to create a single hourly rate;
- increasing travel allowances and attendance pay; and
- different increases in some licensing and registration allowances.

In some agreements a single hourly rate has been negotiated. For example, the Queensland Statement of Intent (QSOI) and the Victorian CFMEU pattern agreement specify annual percentage increases to the base hourly rate. The Victorian agreement notes that these wage increases have been granted 'in recognition of productivity improvements which flow from the adoption of cooperative and efficient measures agreed to herein'. Employees under these agreements are eligible for standard hourly allowances that traditionally have not formed part of the award hourly rate of pay, such as disability allowances not rolled into the site allowance.

Most award disability allowances that do not form part of the base hourly rate have been increasing at a similar rate as award minimum weekly wages. However, in some pattern agreements the travel allowance has been a focus of special attention, partly reflecting a 1996 decision by the Australian Taxation Office (ATO) to tax these. In order to be no worse off after tax, employees have sought increases in travel allowances. For example, the QSOI raised the daily travel allowance from the award rate of $11.80 in 1996 to $18.80 in mid 1999, partially compensating most employees for the taxation ruling. Some pattern agreements have increased award attendance allowances to discourage absenteeism. For example, the NECA-ETU Victorian pattern agreement increased the allowance at the start of the agreement from $12.40 to $30.00 per week.

Licensed trade pattern agreements generally incorporate an enterprise allowance. The NECA-ETU New South Wales pattern agreement specifies an enterprise allowance ranging from $1.60 per hour for a grade 1 worker to $2.00 per hour for a grade 5 worker. The NECA-ETU Victorian pattern agreement does not specify such an allowance. The enterprise allowance in New South Wales is paid as an addition to the hourly rate and is not subject to penalty rates such as overtime multiples. In comparison, the plumbing pattern agreements for both New South Wales and Victoria specify an enterprise allowance of $1.80 per hour and $1.55 per hour, respectively, on which overtime multiples can apply.

The enterprise allowance appears to have evolved as a payment in lieu of trade-offs made within agreements and some disability conditions. For example, some subcontractor agreements note that the enterprise allowance is 'in recognition of the

productivity measures identified herein'. In comparison, other agreements claim that the allowance is 'in return for compliance with clauses of this agreement' and 'in lieu of clauses 12 and 13 of the National Building and Construction Industry Award 1990' (which cover specified disability allowances such as dust, dirty work and height allowance among others).

## Project agreements

Site allowances are an important component of remuneration on large capital city building projects. They are usually specified in project agreements negotiated between head contractors and unions. In New South Wales, the Labor Council often coordinates negotiation of allowances for individual sites. Site allowances are also specified in some industry agreements. In Queensland, they are included in the QSOI. In Victoria, site allowances covering all employees are specified in the VBIA and the NECA-ETU pattern agreement. Site allowances are specified to subcontractors as part of the tender documentation. Concerns can arise when the site allowance is varied through the course of a project without the provision having been identified in the subcontract. Anecdotal evidence suggests that in the past this had occasionally occurred.

There is some confusion in terminology between enterprise and site allowances across the states. For example, most pattern agreements specify an enterprise allowance, yet some subcontractor agreements in some states term the payments a 'productivity allowance'. Similarly, in New South Wales site allowances are commonly referred to in project agreements as 'productivity' or 'productivity/site' allowances.

Site allowances are not new to the industry. Prior to the NBCIA 1990, federal construction industry awards specified that site allowances be ratified, case by case, by the ACAC. Grimshaw and Smith (1988, attachment 12) illustrate the changes in site allowances on Melbourne CBD projects between 1982 and 1987. Hourly site allowances ratified by the ACAC ranged from $0.20 in 1982 to approximately $1.20 in 1987, with significant variation from site to site within individual years. Non-ratified allowances were also paid and were generally higher, ranging from $0.40 per hour in 1982 to $1.80 per hour in 1987.

Site allowances are paid as an hourly rate to all employees on a building site and can vary according to location, value and type of construction project. Pattern agreements generally specify that site allowances be paid only on each hour worked *not* as an addition to the hourly rate of pay on which penalties apply.

VBIA site allowances range from $1.10 to $2.50 per hour. However, the Victorian branches of NECA and the ETU are not parties to the VBIA. They have negotiated site allowances that are usually higher than those specified in the VBIA (box 6.1). Under both the VBIA and NECA-ETU Victorian pattern agreement, the site allowance and threshold project values are adjusted annually by the consumer price index (CPI). Similarly, both agreements note that the site allowance is payable to 'compensate for all special factors and or disabilities on a project and in lieu of the following special award rates - confined space, wet work, dirty work, second hand timber and fumes.' While these provisions are normally paid on an hourly rate for the period they are encountered, the site allowance is paid on an hourly rate for all time worked on the project. For some workers, the value of these provisions may be less than the site allowance. These same provisions are often also traded off under the enterprise allowance.

Box 6.1 **Selected VBIA and NECA-ETU Victorian pattern agreement hourly site allowances**

| | VBIA | NECA-ETU (Victoria) |
|---|---|---|
| Melbourne CBD | | |
| – New work | 2.50 | 2.60 |
| – Renovations, restorations, refurbishment work | 2.20 | 2.25 |
| St Kilda Road or Queens Road | | |
| – New work | 2.50 | 2.25 |
| – Renovations, restorations, refurbishment work | 2.20 | 1.85 |
| Other projects | | |
| – Contract value above $1.8 million to $5.6 million | 1.10 | 1.15 |
| – $5.6 million to $11.2 million | 1.30 | 1.35 |
| – $11.2 million to $22.5 million | 1.45 | 1.50 |
| – $22.5 million to $56.2 million | 1.70 | 1.75 |

*Sources: Victorian Building Industry Agreement 1996–2000*; NECA-ETU Victorian pattern agreement, c. 38.8.

Although higher disability allowances may be more common and there may be greater need for cooperation among employees, some industry participants suggested that the higher site allowances for large capital city building sites was linked to their greater vulnerability to industrial action (see chapter 2). Between 1989 and 1997 the site allowance for new work on large building projects in Melbourne rose from $2.20 per hour to $2.50 per hour – an average increase of 1.4 per cent per year in nominal terms. This suggests that the real value of site

allowances has been constant, whereas other components of remuneration have been growing.

The QSOI specifies a site allowance based on the scale of the project. Site allowances range from nil for projects with a contract value of up to $2.75 million to $1.80 per hour for projects valued between $86.3 million and $105.2 million. Site allowances for projects valued over $105.2 million are subject to negotiation. The site allowances specified in the QSOI are formalised through registered enterprise agreements.

In New South Wales, site allowances have come to be termed site/productivity allowances in project agreements negotiated by head contractors. Allowances at Sydney building projects visited by the Commission ranged from $1.50 per hour to $1.85 per hour. The Memorandum of Understanding applying to Olympic sites appears to have established a $1.85 per hour ceiling for large building projects in Sydney. One head contractor has negotiated an agreement specifying individual site allowances for each of its Sydney projects.

A recent innovation in some project agreements has been to link site allowance payments to the achievement of performance milestones. For example, at one site, payments were made at six monthly intervals after meeting broad performance milestones, such as adherence to project timetables and meeting workplace safety objectives. In comparison, another head contractor has established project agreements under which employees are paid a proportion of the site allowance on a weekly basis for adhering to the principles of the agreement. The ability exists to withhold the remainder of the site allowance pending the achievement of pre-specified project milestones.

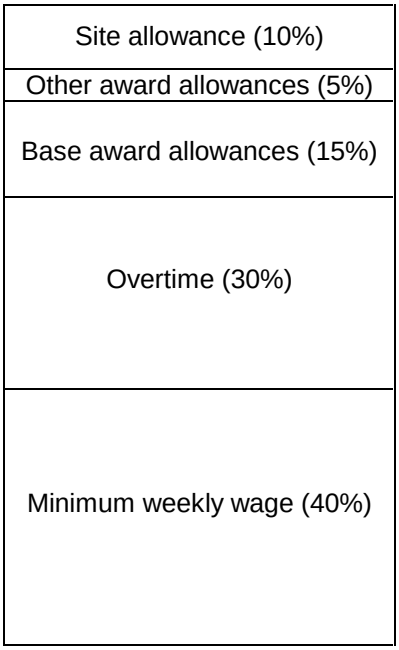
Agreements vary as to whether just one, or both the enterprise and the site allowance is to be paid. For example, the NECA-ETU New South Wales pattern agreement states that the site allowance will be paid in addition to the enterprise allowance 'where awarded by the AIRC and when required by contract provisions specified at the time of tender'. In contrast, some subcontractor agreements include clauses which allow the site allowance to be partially absorbed by the 'productivity/enterprise' allowance. The Commission found examples of where both enterprise and site allowances were paid.

## Contribution of components to gross income

Gross income in any week is determined by the number of hours worked, base hourly pay, the number of overtime hours, award and other allowances. Based on some simplifying assumptions, the approximate share of total remuneration

accounted for by each of the major components is given in figure 6.3. Here employees are assumed to undertake 56 hours of work in a week, of which 38 hours are ordinary time and overtime is paid at 1.5 times the base hourly rate. Other award allowances are assumed not to exceed $60 per week and the site allowance is assumed to be $2.50 per hour. Award base allowances attract overtime penalties while the site allowance does not. Under these assumptions, a tradesperson would receive approximately 40 per cent of gross weekly income from the minimum weekly wage with overtime accounting for a further 30 per cent. Allowances also make an important contribution to gross weekly income. Base award allowances (those which attract overtime penalties) would comprise around 15 per cent of gross weekly income, with other disability and the site allowance accounting for 5 and 10 per cent respectively.

Figure 6.3 **Estimates of components of employee remuneration on large capital city building projects in Victoria[a]**




**a** Assumes a 56 hour week, with 38 hours ordinary time; overtime paid at time and a half; site allowance of $2.50 per hour. Note that enterprise allowances are not common in Victoria.

*Data source:* PC estimates based on several pattern agreements.

## 6.2 On-costs

In addition to direct wage and salary payments, employees can also be entitled to a range of other employment benefits under government legislation, awards and agreements. These benefits, which represent additional costs of employing labour, are termed on-costs. They usually include workers' compensation (covered in

chapter 4), superannuation, payroll tax and time paid for but not worked (for example, annual leave, sick leave, long service leave). Allowances for redundancy vary across industries. Responses to the research issues brief and discussions with interested parties indicate that on large capital city building projects, redundancy, superannuation and long service leave arrangements differ from those in most other industries. One common distinguishing feature is their portability across enterprises.

## Redundancy

In the 1970s, many western governments introduced redundancy provisions in order to more equitably share the negative effects of economic and technological change across the community (Deery, Brooks and Morris 1984). Most Australian state and federal industry awards entitle employees to a payment if they are made redundant. The ACAC established standard entitlements for federal awards in 1984. The key features of these standard entitlements are that payment is only made if there has been involuntary termination of employment, with the level of payment based on the length of employment with the enterprise (ACAC 1984). Standard redundancy entitlements under federal awards accrue after one year of service at yearly intervals, up to a maximum of eight weeks for four years of service (table 6.4).

The level of redundancy entitlements in all federal building and construction awards are similar to other industries. However, several state building and construction awards have additional entitlements (table 6.4). For example, the *Electrical Contracting Industry Redundancy and Technological Change (State) Award* in New South Wales entitles employees to up to a maximum of 16 weeks payment after six years of service with a single employer. In addition, entitlements in most federal building and construction awards and some state building and construction awards accrue in weekly rather than yearly increments.

A distinguishing feature of redundancy provisions in most federal building and construction awards and some state building and construction awards is that while payment is made for involuntary redundancy, it can also be paid when employees resign voluntarily. Another feature that makes building and construction industry awards different to those in other industries is that employers with less than 15 employees are not exempted from paying entitlements.

Pattern agreements applying on large capital city building sites typically have redundancy arrangements which are more generous than the relevant awards. They usually require employers to make weekly payments into state based redundancy funds that are jointly administered by employer and union representatives. Each worker has an ‘account’ into which employers make contributions and which is portable between workplaces. The weekly payments to the fund by the employers

mean that the employee's fund continues to accrue for the duration of his/her time in the industry. This is unlike most other industries, where redundancy payments are capped at eight weeks of pay after four or more years of service with an employer. Part or all of the account can be accessed at specified periods after employment ceases with an employer.

Table 6.4 **Redundancy entitlements in selected awards**

| | *Number of weeks pay for each year of service* | | | | | | |
|---|---|---|---|---|---|---|---|
| *Years of service/ Entitlement*[a] | *<1* | *1<2* | *2<3* | *3<4* | *4<5* | *5<6* | *6+* |
| Standard award provisions[b] | Nil | 4 weeks | 6 weeks | 7 weeks | 8 weeks | 8 weeks | 8 weeks |
| NSW electricians[c] | Nil | 4 weeks | 7 weeks | 10 weeks | 12 weeks | 14 weeks | 16 weeks |
| Queensland electricians[d] | Nil | 4 weeks | 6 weeks | 7 weeks | 8 weeks | 8 weeks | 8 weeks |
| Federal plumbing awards[e] | 1.75 hours per week | 2.4 weeks plus 1.75 hours per additional week up to a maximum of 4.8 weeks | 4.8 weeks plus 1.6 hours per additional week up to a maximum of 7 weeks | 7 weeks plus 0.73 hours per additional week up to a maximum of 8 weeks | 8 weeks | 8 weeks | 8 weeks |
| Federal building and construction award[f] | 1.75 hours per week | 2.4 weeks plus 1.75 hours per additional week up to a maximum of 4.8 weeks | 4.8 weeks plus 1.6 hours per additional week up to a maximum of 7 weeks | 7 weeks plus 0.73 hours per additional week up to a maximum of 8 weeks | 8 weeks | 8 weeks | 8 weeks |

[a] Under most awards, employees are entitled to redundancy benefits for involuntary termination of employment only. However, under the *National Building and Construction Industry Award 1990* and federal plumbing awards, employees are entitled to redundancy benefits upon involuntary termination and voluntary termination after one year of service. [b] Termination, change and redundancy provisions included in federal awards in other industries, based on ACAC (1984). [c] Employed under the *Electrical Contracting Industry Redundancy and Technological Change (State) Award*. [d] Employed under the *Electrical Contracting (Interim) Award - State*. [e] Employed under the *Plumbing Industry (New South Wales) Award 1999*, *Plumbing Trades (Southern States) Award 1999* or the *Plumbing Industry (Qld and WA) Award 1999*. [f] Employed under the *National Building and Construction Industry Award 1990*.

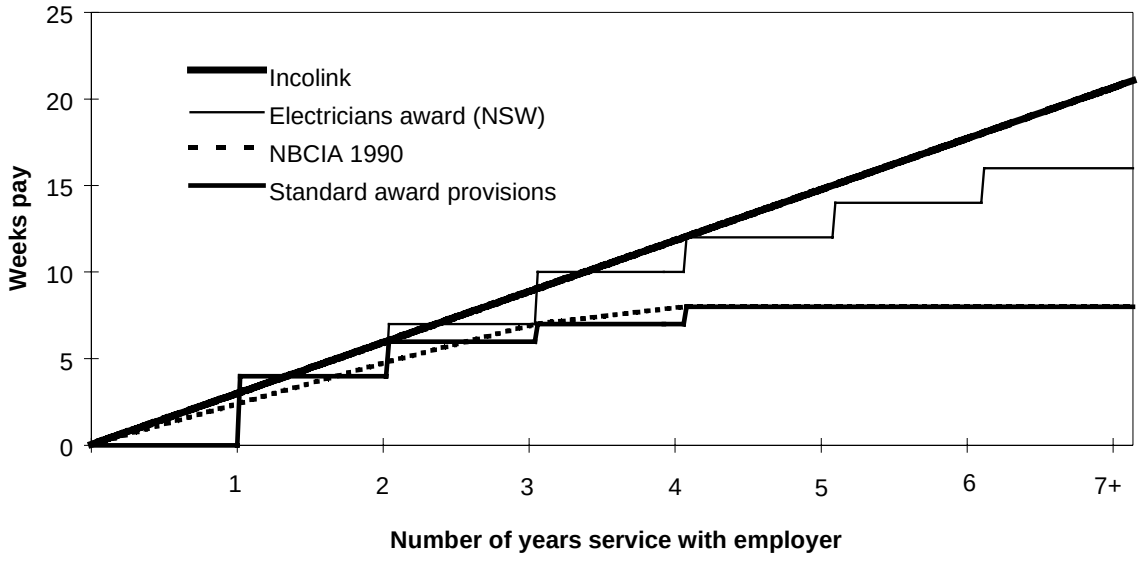
Pattern agreements generally specify a flat weekly rate for redundancy contributions. Employees undertaking less than three days of work do not receive the weekly payment, while a full weekly payment is made for three days or more of work. Casual workers engaged through labour hire companies (which have

agreements with unions) have payments made by the labour hire company, where accrual is on a daily basis.

In 1998, weekly contribution rates per employee specified in pattern enterprise agreements were $46.80 in Victoria and $45.00 in Queensland. The Commission understands that contribution rates in New South Wales ranged between $41.60 per week for CFMEU members, $45.00 per week under the NECA-ETU pattern enterprise agreement and $61.60 per week under the MPA-CEPU pattern enterprise agreement. These contribution levels have remained relatively constant in real terms since the early 1990s. However, the current pattern enterprise agreement for plumbers in New South Wales increased the weekly redundancy contribution from $45.00 in 1997 to $85.00 in 1999.

For most construction employees on large capital city building sites in their first year of service, these arrangements result in comparable benefits to federal building and construction awards. However, after one year's service, redundancy entitlements for individual employees belonging to the various state-based industry schemes are above minimum entitlements specified in the awards (figure 6.4).

Figure 6.4 **Comparison of redundancy arrangements for non-residential building projects[a]**




**a** In this example, a weekly pay rate is calculated for an employee working as a CW3 (carpenter) under the current Victorian MBA-CFMEU pattern agreement. Under most redundancy arrangements, employees do not earn any interest on employer contributions.

*Data sources:* PC estimates based on the *National Building and Construction Industry Award 1990*; *Electrical Contracting Industry Redundancy and Technological Change (State) Award*; Incolink (nd); ACAC (1984).

Generally, payments made to employees by redundancy funds are classified as eligible termination payments and qualify for tax rates of around 30 per cent

(BERT 1998). This would be advantageous to employees on large capital city building sites, most of whom would earn more than $20 000 per annum and therefore face marginal tax rates higher than this. The rules for the amounts which may be claimed by employees, tax liability and the period over which claims may be paid by the industry redundancy funds varies between jurisdictions. For example, under the Incolink scheme in Victoria, employees may claim a maximum of $3100 from the fund upon finishing employment, while any remaining funds may only be claimed in some circumstances (box 6.2).

Box 6.2 **Redundancy payments by Incolink, the Victorian building and construction industry redundancy fund**

An employee may claim an initial benefit from Incolink when their contract terminates, they resign or are made redundant. The initial benefit paid is up to $3100, or the value of contributions credited to the employee if this is less than $3100.

The employee may then claim any remaining funds if he or she:

- has been unemployed for four weeks in a row;
- is unemployed and has not worked in the industry for more than 39 weeks;
- is retiring and over 55 years of age; or
- is unemployed and is leaving Australia for more than two years.

*Source:* Incolink (nd).

Some enterprise agreements examined and industry redundancy fund administration rules include provisions which allow redundancy payments to be made into superannuation for some employees.

In some jurisdictions, employees' accumulated payments may earn additional income. For example, under the Australian Construction Industry Redundancy Trust, which covers some commercial building and construction employees in New South Wales, earnings on funds are distributed to employees if a worker has an accumulated benefit of more than $25. However, under Incolink in Victoria, employees do not earn any additional income on accumulated funds. Instead, earnings from funds are used to pay for employment, training and other services (chapter 4).

## Superannuation

The *Superannuation Guarantee (Administration) Act 1992* requires employers to contribute a minimum proportion of an employee's ordinary earnings to a

superannuation fund. This does not apply to self-employed workers. In some circumstances, employers may not be required to make superannuation payments for employees. This includes employees paid less than $450 per month and those under 18 working less than 30 hours per week (ATO 1998).

The proportion of an employee's ordinary earnings that must legally be paid into a superannuation fund increases from six per cent in 1996-97 to nine per cent in 2002-03. Most building and construction industry awards specify superannuation payment rates, and specify approved funds into which contributions can be made. Payment rates are broadly consistent with levels set out under the superannuation guarantee legislation. ABS statistics show that, in 1997-98, superannuation payments accounted for 6.9 per cent of employee earnings in building and construction, compared to 6.7 per cent in all other industries (ABS 1998e).

The framework applied to altering award redundancy provisions of construction employees also appears to be applied to altering their award superannuation provisions. First, unions and employers establish centralised funds into which individual employees have an account that is portable between employers. Second, agreements specify that regular employer contributions be made to the accounts.

All enterprise agreements examined in the building and construction industry include provisions for superannuation, such as the funds into which payments are to be made. The Construction and Building Unions Superannuation Scheme (C+BUSS) is usually the nominated fund.

Another feature of many of these enterprise agreements is the payment of a flat weekly rate for each employee. This contrasts with federal legislative provisions where superannuation contributions are based on a percentage of an employee's ordinary earnings. The same flat rate generally applies to all employees on large capital city building projects regardless of classification or earnings, and includes casual employees. For example, the pattern enterprise agreement covering electricians in New South Wales states that:

> the contribution rate shall be as required by the Superannuation Guarantee Legislation, provided that the weekly minimum contribution for all employees, except apprentices and trainees, will be: (a) upon commencement of agreement, $40 per week worked; from 1 February 1998, $50 per week worked; from 30 September 1998, $60 per week worked. (NSW electrical pattern agreement, c. 17)

Similar to redundancy payments, labour hire employees accrue superannuation payments on a daily basis.

Weekly levels of payment to nominated superannuation funds under several existing pattern enterprise agreements generally appear to provide for a superannuation

benefit that is higher than specified under the superannuation guarantee charge for lower paid employees. For example, plumbers and plumbers' labourers employed under the MPA-CEPU pattern enterprise agreement over the period 1996-99 receive superannuation entitlements that are between 20 and 60 per cent higher than specified under the superannuation guarantee charge. Weekly superannuation payments for employees working under higher classifications are close to the level required under the superannuation guarantee legislation.

The Federal Government has recently introduced into Parliament proposed amendments to the *Workplace Relations Amendment (Superannuation) Bill 1997* which seek to remove superannuation as an allowable award matter.

## Long service leave

Private sector long service leave was introduced in state-based legislation in New South Wales in 1955. The intention was to reward employees for continuous service with one employer, as had occurred in the public sector for many years (WCP 1998). Employees are entitled to 13 weeks paid leave after 15 years service to a single employer. All other states and territories have introduced similar legislation. Long service leave legislation specific to the building and construction industry has since been introduced in each state and territory, except the Northern Territory.

The level of benefits for building and construction employees are broadly similar to those in general long service leave legislation. However, in some cases a pro-rata entitlement to benefits may be accessed after five years of service. The nature of benefits also varies. In Victoria, South Australia, Western Australia and Queensland, long service benefits are taken as paid leave. In contrast, a cash payment is made for long service in New South Wales, Tasmania and the Australian Capital Territory. In some cases the long service leave funds have sufficient liquidity to meet ongoing liabilities and so employers and clients are not required to make contributions.

Building and construction industry long service leave schemes in New South Wales, Western Australia, South Australia, Queensland and the Australian Capital Territory are administered by separate government agencies. Administration in Victoria and Tasmania is performed by private trustee companies jointly owned by employer associations and unions. In almost all cases, benefits are given directly to employees by long service leave agencies rather than individual employers.

The most notable feature of long service leave schemes in building and construction is that employees are able to continue to accrue benefits as they move between building and construction employers. Although portable schemes can reduce

employee loyalty, the high levels of involuntary labour mobility in building and construction limit the ability of employees to achieve long periods of service with a particular employer. Only a few other industries, such as stevedoring, coal mining and the public service, use such portable arrangements.

## 6.3 Performance effects of direct remuneration and on-costs

Changes to agreements suggest that trade-offs have occurred both within various types of remuneration (base wages and allowances, and employer contributions to on-costs), and between remuneration and other work arrangements (for example, work hours, RDOs).

The key elements which may have implications for performance are:

- rolling-in a range of allowances into base pay;
- introduction of enterprise allowances;
- site allowances based on location and scale of project; and
- portable industry-specific on-cost schemes.

### Rolling-in a range of allowances

Rolling-in a range of allowances into base pay within awards and agreements has generally simplified the number of allowances specified in agreements. In turn, this has reduced the administrative costs to subcontractors of maintaining appropriate records of employee movements and conditions present at each work location. It also eases the burden on head contractors checking to ensure the payments meet appropriate award and agreement provisions. However, rolling-in some allowances could also result in higher unit labour costs as employees receive payments for work conditions that are not encountered on site (table 6.5).

The predominance of pattern agreements among subcontractors may mean that the negotiated trade-offs reflect an 'average' view and not necessarily the trade-off that would have occurred had each employer negotiated on the basis of his/her enterprise-specific circumstances. As noted in chapter 3, it is desirable for employers and employees to have a choice between using a pattern agreement (or a close variation thereof) and enterprise level negotiations that can result in an agreement which is substantially different to the pattern agreement (against a background of a specified safety net).

For employees, rolling-in of allowances is likely to make the base weekly wage more predictable. This could assist employees and their families with financial planning and when applying for credit from financial institutions.

Table 6.5 **Direct effects of wage components on workplace performance**

| | *Labour productivity*[a] | *Unit labour cost*[b] | *Timeliness* | *Product quality* |
|---|---|---|---|---|
| Rolling-in allowances | - | ↓/↑ | - | - |
| Introduction of enterprise allowances[c] | ↑ | ↓ | ↑ | - |
| Site allowances | - | ↑ | - | - |
| Portable on-costs | ↓ | ↑ | ↓ | - |
| Training funded from on-cost funds | ↑ | - | - | - |

[a] Output per hour worked. [b] Labour cost per unit of output. [c] Enterprise allowances here are defined as those negotiated for **particular** enterprise specific trade-offs or productivity improvements. ↑ denotes an increase in the partial performance indicator, ↓ denotes a decrease, and - denotes no direct effect or not applicable.

## Enterprise allowances

Enterprise allowances are specified to include a range of factors such as:

- rolling-in some disability allowances;
- reward to employees for adhering to agreement clauses; and
- reward for productivity.

It is difficult to disentangle the various components for which the enterprise allowance represents compensation.

In pattern agreements, the enterprise allowance is often linked to trade-offs with other work arrangements. However, it may be difficult for individual firms to 'capture' those trade-offs because they have been made in pattern agreements not necessarily tailored to the needs of a particular firm. For firms where the new work arrangements cannot be translated to change at the workplace, the enterprise allowance can just increase labour costs. Where productivity gains more than offset the enterprise allowance, unit labour costs are likely to fall.

Finally, enterprise allowances are sometimes specified to include a general payment for adhering to agreement conditions and to reflect general (unspecified) improvements in productivity. Without defined measures of productivity, it is difficult to offset the increase in labour costs against improved productivity. However, where an enterprise allowance is negotiated for a particular productivity

improvement, increases in labour productivity and timeliness are likely to occur (table 6.5).

## Site allowances

Site allowances generally include trade-offs for some disability allowances. These trade-offs are often similar to those specified for enterprise allowances. Site allowances usually increase with a project's size and proximity to the CBD. The Commission has estimated that site allowances account for around 10 per cent of weekly employee remuneration.

Site allowances are determined through negotiation between head contractors, unions and (in Victoria) some subcontractor associations. Individual subcontractors rarely have input into negotiating these site allowances. Trade-offs are made on their behalf and productivity measures or milestones are set for them. In practice, site allowances are not generally linked to measurable performance outcomes but some head contractors do link a proportion of the payment to broad performance criteria. Detailed discussions indicated that these criteria are often relatively easy to meet. No examples were found where the site allowance had been withheld due to the failure to meet milestones.

Site allowances are sometimes linked to the location and value of the project, such as in the schedule specified in the VBIA. It is difficult to see how location links to the trade-offs and productivity improvements it is meant to reflect. Overall, it is clear that under current arrangements, site allowances increase unit labour costs, with effects on labour productivity, timeliness and quality less obvious.

Both head contractors and subcontractors have similar time related incentives to reward productivity. Head contractors face large liquidated damages if projects are delayed. In some cases, there are bonuses paid by the client for early completion. Subcontractors also have an incentive to reward productivity of their employees as the faster they complete a job the sooner they can move to the next project. Head contractors argue that overall site productivity is maximised by setting common site allowances to ensure a level playing field and so minimise industrial unrest.

Given the contractual structure of a large capital city building site, productivity incentives are likely to be best negotiated between head contractors and subcontractors. The distribution of any benefits to employees would then be determined through enterprise level negotiations between each subcontractor and its employees. This would enable subcontractors to be innovative in how they improve productivity at an enterprise level.

## On-costs

Industry-specific funds have been established for redundancy, superannuation and long service leave accounts. Thus, entitlements are fully portable across enterprises. Enterprise agreements tend to specify that employers make weekly payments to employees' accounts with these funds. This limits employer and employee choice with respect to funds they can use.

The operation of redundancy schemes for employees on large capital city building projects varies significantly from those in other industries. As outlined earlier, payments into employees' accounts accrue on a weekly basis, with no limit to accumulated entitlements. Employees can access some part of these entitlements on voluntary resignation (though this then reduces the future amount available should the worker be made redundant).

Given that interest is often not earned on employees' redundancy accounts and drawn funds may incur lower taxation, there is a financial incentive for employees to shift voluntarily between employers and so claim part of their redundancy entitlements. However, the take up of voluntary redundancy entitlements is relatively low in Victoria (Glasson, J., Incolink, pers. comm., 17 May 1999).

Entitlements to superannuation and long service leave appear to be generally consistent with those in other industries. However, superannuation payments are sometimes a flat rate per worker rather than a percentage of the worker's wage. This can increase unit labour costs for firms employing a relatively high percentage of employees earning lower wages. Portable long service leave arrangements do not discourage employees from moving between firms. This contrasts to other industries where these arrangements are designed to encourage loyalty to a particular employer. When combined with redundancy arrangements, the portable schemes can reduce worker loyalty to individual firms – although high levels of involuntary redundancy are a feature of the industry. Industry discussions revealed that one of the effects of these portable schemes is that as a large capital city building project gets within a few months of completion, many (non-core) employees seek employment on newer projects. The need to replace employees can have negative effects on labour productivity, timeliness and quality (table 6.5).

These portable arrangements also have implications for firm specific skills accumulation. In building and construction, where firms are based on skills specialisation, high labour mobility can reduce the incentive for individual firms to invest in training. Instead firms may seek to accumulate skills through employing employees who already have greater skills.

As discussed in chapter 2, firms in building and construction tend to operate on relatively thin margins. Regular weekly on-costs payments per worker make it more efficient to increase overtime before hiring additional employees.

## 6.4 Alternative pay schemes

Remuneration schemes specified in pattern agreements cover most employees on large capital city building projects. Consequently, alternative remuneration schemes do not appear to be widespread. Only a relatively small number of employees might experience alternative arrangements when:

- head contractors negotiate alternative agreements for their direct employees; and
- workers are self-employed.

### Head contractors

On large capital city building projects, head contractors are increasingly becoming project managers rather than direct employers of labour. However, they usually engage a small workforce to undertake strategic tasks (such as material handling and first aid) which are critical to the operation of the site.

Compared with pattern agreements, work arrangements in head contractor agreements are more likely to be presented as a package of interlinked provisions. In particular, changes to wage components are more explicitly linked with changes in other work arrangements such as hours of work and terms of engagement. Although there is some variation in the remuneration provisions of individual head contractor agreements, they can contain a number of common elements such as:

- a single hourly rate (which in some cases forms the basis of salaries);
- a wider spread of ordinary hours;
- changes to employees' skill classifications and terms of engagement (such as daily and weekly hire); and
- profit sharing and employee benefits programs.

A common change in many head contractor agreements is the establishment of higher base hourly rates – sometimes called 'loaded' hourly rates. These are formed by rolling-in non base award allowances (usually site and tool) into the base hourly rates specified in pattern agreements. Although the tool allowance generally forms part of the base hourly rates for subcontractor employees, the site allowance does not. Under the 'loaded' hourly rates, employees can achieve higher total earnings

because various remuneration calculations (such as penalties and leave) are applied to it.

Most agreements also expand the spread of ordinary hours, with some resulting in greater variation than others. For example, in New South Wales Walter Construction Group's span of hours are 6 am to 8 pm Monday to Friday and 6 am to 6 pm on Saturday and Sunday. Employees opting for salaries must work 200 hours over a four week period, with limits on the number of weekend days that can be worked. Multiplex New South Wales has negotiated its span of hours to be from 6 am to 9 pm Monday to Saturday. A minimum of 8 hours and a maximum of 12 hours can be worked in any 15 hour period.

Arising out of these types of provisions, one head contractor has introduced annual salaries ranging from $56 000 to $64 500 per year for selected employees. However, the salary scheme is optional. Employees may chose to remain employed under the relevant MBA-CFMEU pattern agreement provisions.

Changes to remuneration packages often include changes to employment or skill status of the employees. Some head contractors have negotiated more secure employment status for employees. Most have introduced weekly hire arrangements, while one head contractor has introduced monthly hire for its salaried employees. Other head contractors have altered the skill based classification and pay relativity scales specified in the NBCIA 1990. They have also provided additional targeted skills training for employees to meet the new skill criteria. Eligibility criteria for some remuneration schemes require employees to satisfy a matrix of skills specified in the agreement.

Some head contractors have also extended profit sharing and company benefits programs to all their employees. One agreement offers employees a five per cent share of company profits. This company has also extended corporate employee benefit plans to all employees in the company. These benefits include things like: a company share acquisition program; non contributory company superannuation; various personal insurance covers; and an employee study assistance program.

## Self-employment

Not all workers in building and construction are employees and therefore have their remuneration based on minimum award provisions (chapter 3). Building and construction has the highest share and absolute number of self-employed workers among all industries in Australia. As noted in chapter 2, the share of self-employed workers in building and construction (at least 27 per cent) is much higher than the economy-wide average (10 per cent). However, while no precise data are available,

industry discussions highlighted that self-employment on large capital city building sites is far less common than in the industry overall and in the residential sector in particular. Several responses to the research issues brief noted that the nature of building work is conducive to self-employed contractors offering services to contractors. As detailed discussions with some industry participants revealed, 'all you need is a ute, a mobile phone and some tools'.

In contrast to subcontractor employees, who are employed on the basis of contract *of* services, self-employed trade contractors are hired on a contract *for* services (Buchanan and Allen 1998). Self-employed workers are generally covered by contract conditions rather than award provisions (chapter 3). Consequently, these workers are not usually party to the pattern agreements that are common for enterprises working on large capital city building sites. In particular, remuneration provisions common to employees in building and construction may not apply to them and anecdotal evidence suggests that alternative systems such as piece rates and all-in payments are instead sometimes used. Moreover, in some cases minimum government legislation regarding on-costs may also not apply to these workers. However, awards and agreements restrict most subcontract employees to the base plus allowance remuneration systems and so do not allow the establishment of alternative remuneration packages. Enterprise agreements usually prescribe the set payments that are to be made to employees and their on-cost accounts.

A distinguishing feature of self-employed workers is the prescribed payments system (PPS) taxation regime under which many choose to operate. According to the ATO, PPS provides a mechanism for taxpayers in prescribed industries (which include building and construction) to meet their tax obligations as they earn income under contracts from those in the same industry (Auditor General 1998). Contractors engaging PPS workers are responsible for the deduction of tax (at a rate of 20 per cent and sometimes less) from contract payments and remitting it to the ATO. Importantly, because PPS taxpayers are considered self-employed, they are eligible for a larger range of deductible work related expenses from their taxable income than employees. This can create a financial incentive for workers to classify their employment status as self-employed.

Approximately 70 per cent of PPS revenue is collected from the building and construction industry. The Master Builders Australia Inc. estimated that approximately 40 per cent of workers in the industry are taxed through PPS (MBA Inc., Response 29, p. 12). Anecdotal evidence from industry discussions and submissions suggest that PPS is more widespread in the residential sector than the commercial sector. Furthermore, these sources also suggest that PPS is more widespread in some regions of Australia than others.

It is difficult to establish the extent of PPS in the commercial sector. Anecdotal evidence suggests that the incidence of PPS is rising in the commercial sector in response to taxation advantages, but also as residential and commercial projects overlap (such as high density housing projects). The Queensland Master Builders' Association (QMBA) observed that:

> In recent years there has been a significant drift to the use of workers engaged on PPS in the commercial sector. It is estimated that 60 percent of the industry's workforce in this sector is on PPS. The trend has grown in recent years with the changing role of the builder as a manager of resources versus an employer of workers. The trend toward specialist subcontractors has also been prompted by the perceived imbalance in the taxation system which favours a PPS structure to PAYE. (QMBA, Response 43, p. 3).

However, consultations for this study indicate that PPS on large capital building sites is more widespread in Queensland and less common in New South Wales and Victoria.

The scale of work on large capital city building projects is a major factor limiting the spread of self-employed workers. Detailed discussions revealed that for ease of management, head contractors usually subcontracted discrete parcels of work to subcontractors employing groups of employees.

In seeking to minimise the risk (both financial and in terms of timeliness) associated with engaging subcontractors, head contractors can influence remuneration schemes established on large capital city building projects. As noted in chapter 2, head contractors minimise these risks by ensuring that all subcontractors engaged on their building sites have an enterprise agreement with the relevant union. This acts as a constraint on the use of self-employed workers. While existing pattern agreements do not make provisions for alternative remuneration schemes, they usually explicitly ban:

- pyramid subcontracting – the subcontractor cannot further subcontract parts of work to other subcontractors and, therefore, self-employed workers. However, some agreements allow pyramid subcontracting either where the scale of the project requires a consortium of subcontractors or where the original subcontractor does not have the skills/expertise to undertake a particular aspect of the subcontract; and
- all-in payments – whereby the employees receive a single lump sum piece or hourly rate which includes all additional remuneration payments such as allowances, penalties and on-costs.

## 6.5 Performance effects of alternative pay schemes

### Head contractor employees

In general, remuneration packages for head contractor employees have tended to broaden the span of hours, increase permanency of employment, provide more secure and predictable incomes and increase multiskilling. These developments can have net benefits for both employees and workplace performance. Although only a small number of employees may be covered by these agreements, they occupy strategic positions on the site, so workplace performance is likely to be affected. Indeed, the importance of these employees to the overall performance of the site explains the willingness of head contractors to negotiate alternative remuneration packages.

Broadening the span of ordinary hours is likely to be important where the presence of these employees may be necessary for the site to be operational. Keeping the site open for longer hours can lead to more work being undertaken by subcontractors on a particular day. Improved permanency of employment with the firms may increase worker loyalty to the firm. This may be important from an industrial relations perspective since many of the employees tend to occupy senior worker representative positions on large capital city building projects. The focus on multiskilling is likely to lead to a broadening of the tasks employees undertake on the site. This can improve the flexibility of the firm to use employees across a range of tasks (including management) on the site and thereby improve productivity. Employees may also benefit from more predictable wages, greater permanency of employment and improved skills. Although there may be a trade off with leisure time at certain periods in a work cycle, on the whole employees may be better able to plan leisure time under the arrangements. The improved permanency and, in turn, predictable incomes can assist employees with financial planning and access to borrowed funds.

### Self-employment

Hourly award base plus allowance style remuneration packages continue to be the dominant form of remuneration on large capital city building projects. By restricting the nature of the employment contract, agreements operating on large capital city building projects effectively limit the choice of remuneration system which can apply to subcontract employees. While some workers choose to work under the PPS taxation system, it is difficult to accurately identify their coverage on large capital city building projects.

Master Builders Australia Inc. have claimed that the PPS system 'provides an important opportunity for skilled tradesmen with necessary motivation to significantly increase their earnings with income related to their efficiency and the actual time they worked' (Murray 1998). The QMBA state:

> The PPS system provides a very efficient and effective work structure for the industry and provides a high level of productivity when engaged on piecework rates (QMBA, Response 43, p. 3).

The HIA claim a self-employed labour force leads to efficient outcomes in the housing industry (HIA, Response 13, p. 2).

Legitimate self-employed workers are likely to be more motivated because they can have a greater influence over their output and potential remuneration. Furthermore, they are likely to have choice over their system of remuneration. This can be expected to increase their productivity and lead to improvements in timeliness. It is unclear what quality effects may occur. Workers could face short term financial incentives to rush jobs, but in the longer term quality would be required to ensure future contract work.

Self-employed workers could also lead to lower unit labour costs in the industry. In part this is because self-employed workers have an incentive to capture the taxation advantages associated with PPS taxation arrangements. The lower taxation levels and more opportunities for claiming deductions that PPS can present could lead self-employed workers to bid down labour costs below those in agreements. In addition, contractors engaging self-employed labour may not be required to meet some of the on-costs usually associated with employed labour.

Despite the potential advantages for head contractors in using self-employed workers, there are also some advantages in engaging an employed subcontract labour force. Detailed discussions with industry participants highlighted that given the large and complex nature of the sites, a subcontractor can improve communications and coordination between head contractor management and subcontract employees. Second, ensuring pattern agreement wages are paid is seen as reducing the risk of industrial disputes on sites (chapter 2). It was noted that where wages diverge among employees undertaking similar tasks, industrial unrest may arise. Furthermore, by ensuring agreed payments are made, head contractors said that they may reduce any exposure to subcontractor labour costs if the firms fail.

# 7 Conclusions

The analysis in this report indicates that, on balance, work arrangements on large capital city building sites have shown some improvement since the late 1980s. However, that period should be regarded as a lower bound for assessing work arrangements rather than as a benchmark for high workplace performance. It is clear from the analysis in this report that work arrangements can be further improved. In some cases, this is highlighted by existing differences in work arrangements between states.

Most parties consulted for this study considered the severe downturn in building activity during the early 1990s recession as the key reason why work arrangements had improved. This put considerable pressure on contractors to increase efficiency and reduced the market power of building unions. In New South Wales, the position of unions was threatened by the Gyles Royal Commission and the subsequent initiation of deregistration proceedings against the CFMEU. This contributed to a change in attitudes by all parties, especially in terms of behaviour regarding industrial disputes. Other notable factors leading to workplace change were the greater use of fixed price building contracts and the reduction in inter-union rivalry due to union amalgamations.

This concluding chapter first summarises changes in work arrangements since the late 1980s, including why they occurred and how they affected workplace performance. The scope for further improvements in work arrangements and the role of different parties in achieving such change are then examined.

## 7.1 Overall assessment of work arrangement changes

There have been some improvements in a number of the inefficient work arrangements that existed on large capital city building projects in the late 1980s (changes are summarised in table 7.1). Nevertheless, not all changes have been positive. In particular, some alterations in the composition of remuneration have adversely affected workplace performance.

Table 7.1 **Some changes to work arrangements since the late 1980s**

| *Work arrangement* | *Late 1980s* | *Changes* |
|---|---|---|
| Negotiation processes and outcomes | • Work arrangements negotiated at an industry/trade level to achieve uniform remuneration on similar projects | — |
| | • Subcontractors required to follow site-wide pay and conditions | — |
| | • Unregistered and informal agreements often used to implement agreed outcomes | • Some work arrangements formalised in pattern agreements |
| Remuneration | • Site allowances that usually rise with project size and proximity to the CBD | • Only modest attempts to link site allowances to productivity |
| | • Restrictions on performance related payments (eg: piece work rates) | — |
| | • Access to part of redundancy payment on voluntary resignation | — |
| | • Prescriptive system of allowances | • Some cases where allowances have been incorporated into base pay |
| | • Few head contractor construction workers with salary arrangements | • Shift to salary arrangements for some head contractor employees |
| Management and communication | • Adversarial relationships | • Less adversarial relationships in many cases |
| | • Little formal management training | • Formal management training by some head contractors for their employees |
| | • Poor dispute resolution skills | • Greater emphasis on preventing and resolving disputes |
| Work hours | • Large amount of paid non-working time (late starts & extended breaks) | • Reduced paid non-working time (including staggered breaks) |
| | • Inflexible use of RDOs in Victoria and New South Wales | • Use of RDOs has become more flexible in New South Wales |
| | • One-in-all-in overtime | • One-in-all-in overtime not evident |

(Continued on next page)

Table 7.1 (continued)

| *Work arrangement* | *Late 1980s* | *Changes* |
|---|---|---|
| Workplace health and safety procedures | • Limited safety procedures | • Greater attention to safety |
| | • Unreasonable interpretation and management of inclement weather (including employees refusing to transfer to dry work areas when available) | • More reasonable interpretation and management of inclement weather on most sites |
| | • One-out-all-out during inclement weather and safety breaches | • Fewer cases of one-out-all-out |
| | • Contrived safety breaches to get paid time off | • Contrived safety breaches allegedly still occur but appear to be less prevalent |
| Hiring | • No-ticket-no-start | • No-ticket-no-start made illegal (but often still applies in practice) |
| | • Limits on the use of self-employed subcontractors and labour hire workers | — |
| | • Restriction on the period of continuous employment of casual employees | • Limited easing of restrictions on the use of casual plumbing employees |
| Demarcation | • Dispute related delays and under-employed workers due to demarcation between unions | • Union amalgamation and award restructuring has reduced demarcation and facilitated multiskilling |

Most parties claimed that, compared with the late 1980s, large buildings are now being completed in significantly shorter periods. This was attributed to a number of factors, including changes in technology, such as off-site prefabrication, and improved site communication, dispute resolution and workplace health and safety practices. Overall, however, many parties felt that the shorter construction periods were mainly due to a large decline in time lost due to site-specific industrial disputes and inclement weather practices.

While many parties claimed that site-specific industrial disputes have fallen, the current rate of dispute related delays in building and construction is similar to that experienced in the late 1980s (see chapter 2). It therefore appears that there has been a shift in the source of disputes from site-specific to industry-wide issues. A major reason for this change was probably the greater use of fixed price building contracts, which encourage head contractors to minimise site-specific industrial action.

The shift from site-specific to industry-wide disputes, with little change in the total rate of dispute related delays, may have come at a financial cost. As noted in

chapter 2, head contractors attempt to minimise site-specific disputes by requiring subcontractors to have a union endorsed enterprise agreement and pay their employees a site allowance. The associated costs are probably passed on to clients in the longer term as higher building prices.

The fall in inclement weather delays can be attributed to a more reasonable interpretation of inclement weather by employees, less instances of one-out-all-out, and cases of employees relocating to dry work areas when available. This change in attitudes appears to date from the early 1990s recession and has persisted despite a return to more favourable market conditions since the mid 1990s.

There have been improvements in work arrangements associated with workplace health and safety. For example, many large capital city building sites now have formal committees comprising managers and employees that undertake weekly inspections to identify and remedy safety problems before they lead to injuries. Broad industry statistics indicate that the rate of workplace injuries remains high relative to other industries but their average severity has declined. It is not possible from publicly available data to determine whether changes in the rate and severity of injuries on large capital city building projects differ from building and construction as a whole.

Demarcation disputes between different unions were a major problem in the 1980s. Inefficiencies arose because of unreasonable restrictions on what work could be done by each employee. Dispute related delays also occurred as unions competed to maintain or extend their coverage of employees. It appears that union amalgamation and award restructuring have reduced demarcation problems and facilitated multiskilling.

The most notable changes associated with work hours appear to be the reduced incidence of one-in-all-in overtime and, in some cases, the use of staggered times for breaks, starting and finishing work. In some states, there has also been a trend to make use of flexible RDOs.

There have not been any major widespread changes in the hiring procedures documented in awards and agreements. While compulsory union membership has been formally abolished, it still appears to operate in practice. Where changes in awards and agreements have occurred, they have tended to be limited to particular segments of the workforce.

Changes in the composition of remuneration have had mixed effects on workplace performance. On the positive side, rolling-in of allowances has reduced the prescriptiveness of remuneration schemes and administrative costs. There have also been modest attempts to link payments to performance targets on some projects. On

the other hand, the widespread use of pattern bargaining in determining actual remuneration probably means that some enterprises are paying relatively large wage increases for little or no improvement in productivity. There has also been an increase in the number of portable benefit schemes and their cost.

## 7.2 Scope for further improvements

There has been little change in some of the inefficient work arrangements that existed in the late 1980s. Differences in work arrangements between states suggests that some changes could be readily achievable. Nevertheless, it needs to be recognised that there remain significant obstacles to achieving change. The most fundamental of these is the vulnerability of large capital city building projects to industrial action. As noted in chapter 2, this derives from:

- the high cost of delays;
- a contractual system that separates the control of building sites from the employment of workers (subcontracting);
- de facto compulsory union membership; and
- legal remedies against industrial action that appear to be ineffective.

Delays will continue to be costly for large capital city building projects and the extensive use of subcontracting is likely to remain, given the large gains from specialisation. Thus, achieving further workplace change will depend partly on how the issues of compulsory union membership and legal remedies against industrial action are addressed. These are examined further in section 7.3.

It should also be noted that, unlike many other industries, international competition does not provide a major pressure for more efficient work arrangements. Building and construction is essentially a non-traded activity with no direct competition from imports, or even from different cities within Australia (which is why work arrangements can differ between states). Nevertheless, building and construction inputs (such as capital and labour) are to some extent mobile across state and national boundaries. This could provide indirect pressure to adopt more efficient work arrangements. While competition within a particular city is often strong, the impact that this has on workplace change is constrained by the vulnerability of large building projects to industrial action.

Table 7.2 lists some of the more notable examples of the remaining inefficient work arrangements, though they are not universal across states. The most prominent evidence of the need for further reform is the high rate of dispute related delays in building and construction. Such delays were close to the economy-wide average

during the early 1990s recession, when union negotiating power was temporarily diminished. However, since commercial building activity began growing again in the mid 1990s, dispute related delays have returned to levels similar to that recorded in the late 1980s. As noted above, it appears that this is due to an increase in industry-wide disputes.

Table 7.2 **Examples of remaining inefficient work arrangements**

- Restrictions on the use of enterprise level negotiations by subcontractors
- Subcontractors required to follow site-wide pay and conditions
- Restrictions on performance related payments (eg: piece work rates)
- Inflexible use of RDOs in Victoria
- De facto no-ticket-no-start policy
- Limits on self-employed subcontractors, casual and labour hire workers
- Site allowances that typically rise with project size and proximity to the CBD

The potential to reduce disputes is illustrated by differences between New South Wales and Victoria. The rate of dispute related delays for building and construction in New South Wales has been below the national average for that industry in every year since 1994. This is significant, given that there has been a boom in commercial building in Sydney associated with the Olympics. In contrast, the rate of dispute related delays in Victorian building and construction since 1994 has been at least twice as high as that in New South Wales. This suggests that the additional impetus for reform in New South Wales provided by the Gyles Royal Commission has had a positive effect. The fact that this effect has endured despite a building boom may reflect bipartisan political support in that state for the recommendations of the Gyles Royal Commission.

Another notable example of the scope for reform is the negotiation process. Work arrangements on large capital city building projects are still largely the result of project and industry/trade level negotiations. This discourages innovative subcontractors from introducing more productive or efficient work arrangements in their enterprises and so can act as a constraint on future productivity growth. Again, there are inter-state differences. The use of pattern agreements is widespread in Victoria, whereas unions in New South Wales have been less successful in determining the content of subcontractor enterprise agreements.

While a greater enterprise focus in negotiations is desirable, it needs to be recognised that if all work arrangements were negotiated at an enterprise level, head contractors could lose important elements of control over building sites. Coordinating and planning work could be problematic if work arrangements negotiated individually by subcontractors differed significantly. For example, if

different RDOs or inclement weather procedures applied across a site, this would make it difficult to coordinate the many interdependent tasks of different subcontractors.

It has been argued in this report that subcontractors should not be forced by head contractors to use a pattern enterprise agreement. By the same token, enterprise level negotiations should not undermine the productivity gains associated with the coordination role of head contractors. In practice, this means that enterprise agreements should not constrain the ability of head contractors to establish site-specific work arrangements *where they are needed for efficient operations*. This would include site safety and inclement weather procedures, and site opening hours and RDOs. It does not include matters that have relevance beyond a particular project, such as remuneration and hiring arrangements used by subcontractors.

Actual remuneration (including site allowances) is best determined by employers, which in most cases are subcontractors. Productivity incentives for a project would be negotiated between the head contractor and its subcontractors. The distribution of any benefits to employees would then be determined through enterprise level negotiations between each subcontractor and its employees. This would enable subcontractors to be innovative in how they improve productivity at an enterprise level.

There is a range of other work arrangements that could be improved. For example, it is not apparent why there should be restrictions on the use of self-employed subcontractors, casuals and labour hire workers. They are legitimate alternative sources of labour, provided there is compliance with relevant taxation and other legislation (such as for workers' compensation and superannuation) and they do not impede the coordination role of head contractors. Self-employed workers are likely to be more motivated because they have greater influence over their output and remuneration. Restrictions on the use of labour hire workers could limit the scope for contractors to introduce innovative work arrangements. One head contractor in Queensland indicated that it uses labour hire workers for its crane crew for the length of a project. This appears to be rare in the southern states.

There are restrictions on the use of performance related payments, such as piece work rates and all-in payments, that similarly appear hard to justify. Such alternative forms of remuneration may have a major positive effect on workplace performance.

There is also scope for greater flexibility in RDOs. It appears that large building sites always close on the official RDO in Melbourne. In contrast, the option of changing RDOs is being used in Sydney and Brisbane.

## 7.3 Role of the parties in further workplace change

Parties with different, and sometimes competing, interests influence work arrangements on large capital city building projects. This is likely to remain the case because there are large gains from specialisation and hence subcontracting. This concluding section examines the roles of different parties in achieving further workplace change.

### Head contractors

Head contractors control large capital city building sites and so have a major role in determining work arrangements. Their behaviour is influenced in large part by the sizeable financial penalties they can incur if a matter under their control causes delays on a major building project (this is now a common condition in building contracts). Since the late 1980s, they have attempted to reduce such delays through improved management, dispute resolution and safety procedures.

As noted above, head contractors attempt to minimise the prospect of site-specific industrial disputes by requiring subcontractors to pay their employees a site allowance and use a union endorsed enterprise agreement. Thus, head contractors are more inclined to allow changed work arrangements on their building sites if they are approved by unions. This situation is likely to continue as long as unions retain their considerable market power in the negotiation of work arrangements on large capital city building projects.

There is limited scope for head contractors to reduce the vulnerability of large capital city building projects to industrial action. Theoretically, they could reduce their use of subcontracting and so internalise the cost of making concessions in disputes. However, this would mean foregoing the sizeable gains from specialisation in building and construction. Another avenue would be for head contractors to remove the de facto no-ticket-no-start policy on their large building sites. There is little incentive for an individual head contractor to do this alone. It would bear a large cost in the short term (due to industrial action) and, assuming it remained financially viable, any resulting benefits would probably be captured by its competitors.

The interests of head contractors also need to be recognised in the negotiation of workplace change because of their need to coordinate the many interdependent tasks of different subcontractors across a building site. This is a legitimate concern, given that it can have a substantial effect on a project's productivity. However, current levels of control by head contractors over some work arrangements appear to be excessive. In particular, exact rates of pay are more appropriately negotiated by

employers, which in most cases are subcontractors. Nevertheless, as noted above, there appears to be a case for ensuring that some non-wage arrangements are uniform across a building site.

## Subcontractors and employer associations

Subcontractors employ most workers on large capital city building sites and so should have a major role in determining work arrangements. In particular, they are in the best position to assess the trade-offs involved in negotiating changes in remuneration. Therefore, actual levels of remuneration are best addressed in enterprise agreements, rather than in industry or project agreements.

For non-remuneration work arrangements, there needs to be sufficient flexibility in subcontractor enterprise agreements to enable head contractors to coordinate tasks effectively on a building site. This benefits both the head contractor and its subcontractors by, for example, ensuring that deadlines are met.

As noted in chapter 2, the cost of negotiating work arrangements is likely to be high for the many small subcontractors in building and construction. Hence, there is merit in smaller subcontractors using employer associations to negotiate their enterprise agreements if they choose to do so. However, subcontractors should have the option to use enterprise level negotiations if they wish. At present, subcontractors are often compelled to follow the outcomes (especially remuneration) collectively negotiated by the relevant union and employer association, even if they are not a member of that association.

It is unclear what proportion of subcontractors are members of an employer association and whether their diverse interests can be adequately represented by a single association. Several larger subcontractors consulted for this study said that they had no real influence over the outcomes of negotiations by their employer association (see chapter 3). Some of these firms claimed that they had good relations with their employees and would achieve better outcomes if they were less restricted in their own negotiations by industry/trade agreements.

Some subcontractors nevertheless appear resistant to change. Several employers consulted for this study stated a preference for uniform work arrangements across projects so that they do not have to compete for employees or projects on the basis of work arrangements. However, this also weakens innovation and hence productivity growth.

There are signs that subcontractors in some states are making greater use of enterprise level negotiations. As noted in chapter 3, the Master Builders'

Association of Western Australia has shifted away from industry/trade level negotiations, because its smaller members were disappointed with the lack of identifiable productivity benefits from such negotiations. Similarly, discussions with subcontractors and trade associations in Brisbane suggest that there is an emerging trend towards greater use of enterprise level negotiations in Queensland.

## Employees and unions

Unions can play a positive role as a 'collective voice' for employees to express their concerns about work arrangements without fear of being victimised. Most parties (including employers) consulted for this study also considered that unions can play a useful role in constraining less scrupulous employers in building and construction. This reflected a widespread concern about the quality of management skills in the industry.

On the other hand, building and construction unions can hinder change because they have significant market power in negotiations over work arrangements. This market power reflects the high rate of union membership on large capital city building sites and the vulnerability of such sites to industrial action.

Most parties consulted for this study claimed that de facto compulsory union membership still applies on the largest commercial building sites in or near the CBD of Sydney, Melbourne and Brisbane. Unions are able to maintain a no-ticket-no-start policy on the largest building sites because they are the most vulnerable to industrial action. Some parties also claimed that unions are able to monitor employee compliance with no-ticket-no-start through union involvement in site safety inductions and verification of payments to portable benefit schemes (see chapter 2 for details).

It is evident that unions are able to exploit the vulnerability of large capital city building sites to industrial action. As noted above, head contractors typically require subcontractors to pay their employees a site allowance and use a union endorsed enterprise agreement. The additional costs associated with these arrangements are seen, in part, as a means of buying industrial peace.

There is also a concern that, like employer associations, unions cannot adequately represent the diverse interests of their members. For example, some parties consulted for this study argued that many workers on large capital city building sites would prefer to be self-employed but are prevented from doing so by union opposition. Other parties argued that employees follow union directions because they believe that they would not otherwise be able to work on large building sites.

Nevertheless, there are differences in the impacts of unions between states. This is illustrated by the differences between New South Wales – subsequent to the Gyles Royal Commission – and Victoria. New South Wales has a much lower rate of dispute related delays and less widespread use of pattern bargaining than Victoria. In addition, many parties consulted for this study claimed that the Victorian branches of the CFMEU and the CEPU are less flexible than their New South Wales counterparts.

## Governments

The scope for unions to misuse their market power in building and construction has been addressed directly by enforcement of provisions of the *Workplace Relations Act 1996* by the Office of the Employment Advocate. Similarly, the Australian Competition and Consumer Commission has acted against alleged breaches of the *Trade Practices Act 1974* by union officials in building and construction. These actions appear to be having an effect. For example, some Queensland subcontractors consulted for this study indicated that as a consequence they now had greater scope to use enterprise level negotiations.

The lack of timely penalties against unprotected industrial action is a particular problem for large capital city building projects. The contracts used for such projects usually state that a project must be completed by a specific date or the contractor will be subject to large financial penalties. Thus, there has been a tendency by employers to accept union demands rather than take legal action that can be costly and slow to reach a final (uncertain) outcome.

The Federal Government proposes to address this issue through the *Workplace Relations Legislation Amendment (More Jobs, Better Pay) Bill 1999* introduced into Parliament on 30 June 1999. The Bill would oblige the Australian Industrial Relations Commission (to be renamed the Australian Workplace Relations Commission) to issue orders to stop or prevent unprotected industrial action within 48 hours of an application being made (Reith 1999). The Bill would also prohibit conduct that breaches freedom of association under the guise of project agreements.

The above mentioned Bill also addresses de facto compulsory unionism by prohibiting the current restrictions on the use of self-employed workers on large capital city building sites. These restrictions are typically specified in enterprise, project and industry agreements. As noted above, some parties consulted for this study argued that many workers on large capital city building sites would prefer to be self-employed, but are prevented from doing so by union opposition. However, it needs to be recognised that the taxation advantages of self-employment have often been abused in other areas of building and construction. In particular, some

construction workers appear to be claiming to be self-employed when in actuality they are employees. The Australian Taxation Office is taking action to address this problem in consultation with parties in the industry, including employer associations.

There is a limit to the capacity of governments to facilitate change through regulation. This is because of the economic forces which condition the behaviour and relative bargaining positions of other parties. Recent examples of how this has manifested itself include:

- pattern bargaining in response to changed industrial relations legislation to encourage enterprise level negotiations;
- the use of unregistered project agreements to avoid the strict certification process for multiple employer agreements in the federal jurisdiction; and
- making use of a union endorsed enterprise agreement a condition of tender for subcontractors, so that freedom of association laws are not breached.

Governments can also play a direct role in facilitating workplace change through their role as a client. This is already occurring through the use of codes of practice for government projects. These require contractors on government projects to follow the principle of voluntary unionism and not be involved in the coercion of subcontractors into using specific types of work arrangements (APCC 1997). However, the impact of these codes on large capital city building sites has been limited, because there has been a trend away from governments owning large capital city buildings.

## Private sector clients

Private sector clients do not take a direct role in determining work arrangements on large capital city building projects. Nevertheless, their actions can be influential. Most notably, the push by clients in the early 1990s to use fixed price building contracts was a major factor leading to the reduction in delays caused by inclement weather and site-specific disputes.

Fixed price contracts have also been successful in reducing unexpected cost increases on particular projects. However, they may have been less successful in limiting cost increases and encouraging productivity growth between projects over time. As noted above, head contractors have responded to union market power by requiring subcontractors to pay their employees a site allowance and use a union endorsed enterprise agreement. If the additional costs associated with this

arrangement are not paid in exchange for productivity improvements, then they are probably passed on to clients in the longer term as higher building prices.

# A Organisations visited

Discussions were held with representatives from the following organisations:

Air Conditioning and Mechanical Contractors' Association of Victoria Ltd

Association of Wall and Ceiling Contractors (Victoria)

Australia Post

Australian Centre for Industrial Relations Research and Training (University of Sydney)

Australian Graduate School of Engineering Innovation

Australian Taxation Office

Barclay Mowlem Construction Ltd (Queensland)

Baulderstone Hornibrook Pty Ltd (Victoria)

Building Industry Specialist Contractors Organisation (New South Wales)

Building Research Centre (University of New South Wales) (renamed the Australian Centre for Construction Innovation in November 1998)

Built Futures Communications

Civil & Civic Pty Ltd (New South Wales) (now Lend Lease Projects)

Civil & Civic Pty Ltd (Queensland) (now Lend Lease Projects)

Civil Contractors Federation (National)

CoInvest Ltd

Concrete Constructions Group Ltd (New South Wales) (now Walter Constructions Group Ltd)

Construction Training Australia

Department of Industry, Science and Tourism (now Department of Industry, Science and Resources)

Department of Employment, Workplace Relations and Small Business

Electrical Contractors' Association of Queensland

Grocon Pty Ltd

Housing Industry Association Ltd (National)

John Holland Construction and Engineering Pty Ltd (Queensland)

Labor Council of New South Wales

Leighton Contractors Pty Ltd (New South Wales)
Master Builders' Association of New South Wales
Master Builders' Association of Victoria
Master Builders Australia Inc. (National)
Master Painters' Association (Victoria)
Master Painters', Decorators and Signwriters Association of Queensland
Master Plumbers' and Mechanical Services Association of Australia
Master Plumbers' Association of Queensland
Master Plumbers Australia Ltd (Victoria)
Metal Trades Industry Association (Victoria) (now Australian Industry Group)
Multiplex Constructions (New South Wales) Pty Ltd
Multiplex Constructions (Queensland) Pty Ltd
Multiplex Constructions (Victoria) Pty Ltd
National Building and Construction Committee
National Electrical and Communications Association (Victoria)
New South Wales Department of Public Works and Services
Office of the Employment Advocate
Property Council of Australia (National)
Queensland Department of Public Works
Queensland Department of Training and Industrial Relations
Queensland Master Builders' Association
Redundancy Payment Central Fund Ltd (Incolink)
Skilled Engineering
Thiess Contractors Pty Ltd (New South Wales)
Thiess Contractors Pty Ltd (Queensland)
Thiess Contractors Pty Ltd (Victoria)
Victorian Building Industry Disputes Board
Watkins Pacific (Watpac) Ltd
WorkCover (Queensland)

Detailed discussions were held at the following large capital city building sites. Among those consulted were head contractor managers, union representatives (CFMEU and CEPU), subcontractor managers and their employees:

Darling Park, Civil and Civic Pty Ltd, Sydney

60 Castlereagh Street, Concrete Constructions Group Ltd, Sydney

Bank Place, Multiplex Constructions (New South Wales) Pty Ltd, Sydney

Aurora, Multiplex Constructions (Victoria) Pty Ltd, Melbourne

City Square, Grocon Pty Ltd, Melbourne

# B Responses to research issues brief and work-in-progress report

The Productivity Commission received written responses from the following organisations or persons (* indicates that the response is commercial in confidence):

## Responses to the research issues brief

Air Conditioning and Mechanical Contractors' Association of New South Wales Ltd
Air Conditioning and Mechanical Contractors' Association of Victoria Ltd
Australian National Training Authority
Building Industry Specialist Contractors Organisation (Tasmania)
Chamber of Commerce and Industry (Western Australia)
Civil Contractors Federation (Queensland)
Civil Contractors Federation (South Australia)
* Concrete Constructions Group Ltd (National) (now Walter Constructions Group Ltd)
Construction Training Australia
Department of Industry, Science and Tourism
Department of Employment, Workplace Relations and Small Business
Fire Contractors Victoria Inc.
Green Eden Watering Systems Pty Ltd (South Australia)
Housing Industry Association Ltd (National)
John Goss Projects Pty Ltd (Queensland and New South Wales)
John Holland Construction & Engineering Pty Ltd (New South Wales)
* Leighton Contractors Pty Ltd (New South Wales and ACT)
Master Builders' Association of Western Australia
Master Builders Australia Inc. (National)
Master Painters', Decorators and Signwriters Association of Queensland
Master Plumbers' and Mechanical Services Association of Western Australia Inc.
Master Plumbers' Association of Queensland
Master Plumbers Australia
Professor Vernon Ireland (Australian Graduate School of Engineering Innovation)

Queensland Master Builders' Association
Ralph M. Lee Pty Ltd (Northern Region)
Redundancy Payment Central Fund Ltd (Incolink)
Stork Electrical Pty Ltd (Queensland)
Thiess Contractors Pty Ltd (National)
* Urban Development Institute of Australia (Queensland)

## Responses to the work-in-progress report

Australian Constructors Association
Civil Contractors Federation (Victoria)
Construction Policy Steering Committee (New South Wales Government)
Department of Architecture, Building and Planning (University of Melbourne)
Department of Communications, Information Technology and the Arts
Department of Employment, Workplace Relations and Small Business
Housing Industry Association Ltd (National)
Leighton Contractors Pty Ltd (New South Wales and ACT)
Master Builders' Association of Victoria
Master Builders' Association of Western Australia
Master Builders Australia Inc. (National)
Master Plumbers' and Mechanical Services Association of Australia
National Electrical and Communications Association (New South Wales)
Queensland Master Builders' Association

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—— 1998f (and previous issues), *Labour Force, Australia*, Cat. no. 6203.0, ABS, Canberra.

—— 1998g, *Labour Mobility, Australia*, Cat. no. 6209.0, ABS, Canberra.

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