

**Safety Net Review –  
Wages  
2004**

**Commonwealth Submission**

**18 February 2004**

# Table of Contents

<b>SECTION 1: COMMONWEALTH POSITION</b> .....	<b>1</b>
Introduction .....	1
Grounds for position .....	1
Position in this case .....	3
Timing of SNR .....	4
Submission by State and Territory Governments .....	4
Submission by the Disability Employment Action Centre and the National Council for the Intellectual Disability (DEAC/NCID) .....	5
Protecting the low paid .....	5
Conclusion .....	6
<b>SECTION 2: ECONOMIC OUTLOOK</b> .....	<b>9</b>
Introduction .....	9
Domestic forecast .....	9
Outlook for the world economy .....	10
Key risks to the economic outlook .....	10
Company Profits .....	12
Profit and Wages Share .....	14
Conclusion .....	16
<b>SECTION 3: WAGES DEVELOPMENTS</b> .....	<b>17</b>
Introduction .....	17
Aggregate wages growth .....	17
Wage Cost Index .....	20
Federal certified agreements .....	20
Executive remuneration .....	21
Wage dispersion .....	22
Changes in the value of the FMW and C10 .....	25
Workplace agreements .....	28
Wage increases under awards and agreements .....	34
Conclusion .....	37

<b>SECTION 4:</b>	<b>PRODUCTIVITY AND WORKPLACE BARGAINING.....</b>	<b>39</b>
Introduction	.....	39
Productivity growth in award-reliant industries.....		40
Workplace bargaining.....		47
Impact on labour costs .....		50
Distribution of productivity gains.....		52
Conclusion .....		54
<b>SECTION 5:</b>	<b>IMPACT ON EMPLOYMENT.....</b>	<b>55</b>
Introduction	.....	55
Cost of the claim.....		55
Research .....		56
Inequality and the minimum wage.....		60
Sectoral Impact .....		63
Conclusion .....		66
<b>SECTION 6:</b>	<b>LIVING STANDARDS.....</b>	<b>67</b>
Introduction	.....	67
Budget standards .....		67
Household income.....		68
Tax Cuts .....		70
Conclusion .....		71
<b>Appendix A</b>	<b>Regression Results.....</b>	<b>73</b>

# SECTION 1: COMMONWEALTH POSITION

## Introduction

*Commonwealth will not oppose an award increase of up to \$10 per week to the Tradesperson level*

- 1.1 This submission is made on behalf of the Commonwealth in accordance with sub-section 44(1) of the Workplace Relations Act 1996 (WR Act). The Commonwealth opposes the claim by the Australian Council of Trade Unions (ACTU) for a \$26.60 per week increase in all award wages.
- 1.2 The large claim from the ACTU comes on top of two large increases awarded to all award wages in both the 2002 and 2003 Safety Net Review – Wages (SNR). The ACTU claim will have adverse economic impacts and is not in the public interest.
- 1.3 The Commonwealth's position is that it will not oppose an increase of up to \$10 per week in the award rates of the low paid, that is, applying to award rates up to and including the equivalent of the Tradesperson's rate.

## Grounds for position

*The ACTU claim places the pursuit of high award increases above all other considerations*

- 1.4 The claim by the ACTU places the pursuit of high award increases above all other considerations. These considerations include the creation and maintenance of jobs and sustaining a prosperous Australian economy through workplace bargaining.
- 1.5 In considering the ACTU claim, the Commission must perform its functions in a way that furthers the objects of the WR Act and have regard to the public interest, including the state of the national economy and the effects that any award made may have on it, particularly any effects on inflation and the level of employment.

- 1.6 A central feature of the legislative framework is the obligation imposed on the Commission under subparagraph 88A(d)(i) to ensure that its functions and powers in relation to making and varying awards are performed and exercised in a way that encourages the making of agreements between employers and employees at the workplace or enterprise level.
- 1.7 Continued productivity growth through workplace bargaining is important for sustained improvements in the living standards of the Australian community. It is crucial that any impediments to productivity growth, such as undue reliance on award wage increases, are reduced by the encouragement of workplace agreements.
- 1.8 The ACTU seriously underestimates the impact of its claim on aggregate wage growth, employment levels and job opportunities. The ACTU claim is part of a longer term strategy to increase the Federal Minimum Wage (FMW) to \$550 per week. Depending on the measure used, the ratio of Australia's FMW to median wages is already the highest or the second highest in developed industrial countries.
- 1.9 The ACTU submits no convincing evidence of the impact that further large award increases will have on current or future employment, and consequently living standards, particularly of award-reliant workers. The claim ignores the cumulative impact of large annual increases in minimum wages and the effect that has on employment.
- 1.10 The Commonwealth submits that the ACTU again places undue emphasis on the role of the wages system in maintaining social equity. The living standards of the low paid are best addressed through the tax-transfer system. This is evidenced by recent tax cuts which were of significant benefit to low paid workers.

- 1.11 Large award wage increases do not benefit households where no one works. An unnecessarily large wage increase will act to reduce employment levels and job prospects particularly for people with low skill levels.

## Position in this case

- 1.12 As stated in the introduction to this section, the Commonwealth's position is that it will not oppose an increase of up to \$10 per week in the award rates of the low paid, that is, applying to award rates up to and including the equivalent of the Tradesperson's rate.
- 1.13 In considering the Commonwealth's position and the large increase sought by the ACTU, it is important that the Commission take into account that low-paid workers are now receiving the benefit of personal income tax cuts introduced by the Australian Government from 1 July 2003. In addition, the *Mid-Year Economic and Fiscal Outlook* (MYEFO) forecast of the annual rate of inflation for 2003-04 remains very low.
- 1.14 In order to represent a genuine safety net adjustment (SNA), only award rates up to and including the equivalent of the Tradesperson's rate – Level C10 in the *Metal Engineering and Associated Industries Award* – should be adjusted.
- 1.15 The adjustment must apply until the next *Safety Net Review - Wages* (SNR) and be fully absorbed into all above award payments including enterprise agreements and informal over-award agreements.
- 1.16 There must also be at least a twelve month gap between the operative date of the previous SNA and the operative date of any adjustment awarded in this case.

*Low-paid workers received tax cuts from 1 July 2003. Inflation remains very low*

## **Timing of SNR**

- 1.17 An issue raised for the Commission's consideration is the appropriateness of the timing of the finalisation of the SNR in relation to the timing of the handing down of the Budget by the Australian Government.
- 1.18 A short deferral of the finalisation of the SNR until after the Budget would enable the SNR to be informed by up-to-date Treasury information on the national economic outlook. Currently, the 2003-04 MYEFO is substantially relied upon for this purpose.
- 1.19 The 2004-05 Budget is scheduled to be handed down on 11 May 2004. If the Commission considered it appropriate it could allow the parties and interveners to quickly bring forward relevant additional information in the Budget context.
- 1.20 The Commonwealth's assessment of the impact of a delay of the finalisation of the SNR on the operative date of award increases is that it would be minimal. Last year it appears that only one Federal award was varied before 20 May 2003. Flow-on through the State jurisdictions occurred over the period 27 May to 1 August 2003.

## **Submission by State and Territory Governments**

- 1.21 The State and Territory Governments submit that an increase of \$20 per week in all award rates of pay is a sustainable increase. The Commonwealth does not accept this contention. The grounds put forward by the Commonwealth for opposing the ACTU's claim also apply to the submission of the State and Territory Governments.

## **Submission by the Disability Employment Action Centre and the National Council for Intellectual Disability (DEAC/NCID)**

- 1.22 DEAC/NCID has submitted supported wage and workplace bargaining issues in the disability employment sector that are similar to the issues raised in the 2003 SNR. In the 2003 SNR decision, the Commission referred these matters to the relevant Panel Head who subsequently established an Industry Consultative Council (ICC). In addition, the Commission confirmed that the level of the supported minimum wage was a matter for separate Full Bench proceedings.
- 1.23 DEAC/NCID acknowledges that the ICC is already dealing effectively with the matters before it. The Commonwealth supports a systematic process similar to that instituted by the Commission last year for adjusting the supported minimum wage prescribed under each award.

### **Protecting the low paid**

- 1.24 The emphases in the WR Act of providing a minimum award safety net for the low paid, attaining high levels of employment as well as encouraging agreement-making at the workplace level are not being fully reflected in SNR decisions.
- 1.25 The process of adjusting all award rates through the SNR has a significant impact on the labour costs of employers as wage increases achieved through SNAs do not offer the same potential for workplace-level productivity improvements as through the workplace bargaining process.
- 1.26 The Commission's role in encouraging agreement making is undermined by the regular adjustment of all award rates regardless of wage level.

*A capped increase is consistent with the intent of the legislation*

- 1.27 A capped SNA is considered consistent with the intent of the WR Act because it addresses the statutory requirement that the Commission exercise its powers in ways consistent with the fundamental objectives of the legislation, that is, that wages and conditions be determined as far as possible by agreement at the workplace or enterprise level; that awards act as a genuine safety net; and that adjustments to award rates do not act to discourage agreement-making.
- 1.28 The Commission's 2003 SNR decision went some way towards addressing this by providing a slightly higher wage increase for employees at lower wage levels in order to give some weight to the possible effect of the increase on employment levels of low paid workers.
- 1.29 The Government's proposed amendments to the WR Act in the Workplace Relations Amendment (Protecting the Low Paid) Bill 2003 would provide further legislative guidance to the Commission when exercising its powers in adjusting the safety net.
- 1.30 The legislative amendments would require the Commission to address as a primary consideration the needs of the low paid, including their need for employment and to consider the employment prospects of the unemployed and the capacity of employers to pay the increase.
- 1.31 The legislative amendments have been inquired into by the Senate Employment, Workplace Relations and Education Legislation Committee. The Committee tabled the report of its findings in the Parliament on 19 June 2003.

*A primary consideration is the employment needs of the low paid*

## **Conclusion**

- 1.32 The Commonwealth is opposed to the claim by the ACTU and urges the Commission to reject it. The claim ignores the requirement for the Commission to establish a genuine award safety net and encourage workplace bargaining.

- 1.33 The ACTU overstates the capacity of employers to continue to pay large increases through the award system. Large SNAs act as a disincentive for employees and employers to engage in workplace bargaining.
- 1.34 The claim ignores the impact that a further large award increase would have on current and future employment, and consequently the living standards, particularly of the low paid.



## SECTION 2: ECONOMIC OUTLOOK

### Introduction

- 2.1 The Australian economy is forecast to grow by 3¾ per cent in 2003-04. The positive outlook is underpinned by expected robust growth in domestic demand and a stronger performance from the external sector while non-farm GDP is expected to grow solidly.
- 2.2 Employment growth should remain moderate with the unemployment rate remaining steady. The forecast for year-ended inflation in 2003-04 is 2¼ per cent, reflecting the appreciation of the Australian dollar and continued moderate wages growth.
- 2.3 Near-term risks around the outlook have diminished over the course of 2003 and are now more evenly balanced. However, some medium-term risks around both the domestic and international outlooks have become more pronounced.

### Domestic forecast

- 2.4 The latest economic forecasts were published in the 2003-04 *Mid-Year Economic and Fiscal Outlook* (MYEFO) released in December 2003. Recent economic releases have been broadly consistent with MYEFO forecasts.
- 2.5 After slowing in the first half of 2003, economic and employment growth have since recovered.
- 2.6 In the year to December 2003, employment grew by 188 600 persons, or 2.0 per cent, and the unemployment rate declined to 5.6 per cent. Much of this growth was in late 2003, with over 182 000 jobs created in the five months to December 2003.

- 2.7 Employment growth is forecast to be around 1½ per cent in 2003-04, and 1¾ per cent in 2004-05, in line with the profile of non-farm GDP growth. The unemployment rate is expected to remain at around, or a little below, 5¾ per cent over the forecast horizon.
- 2.8 Inflation over the year to December fell to 2.4 per cent.
- 2.9 Inflation is expected to decline to around, or possibly below, the bottom of the target band of 2-3 per cent through the forecast horizon, in line with modest growth in wages and solid productivity growth.
- 2.10 Australia's low rate of inflation in part reflects declines in the price of imported goods resulting from the strong appreciation of the Australian dollar. The price of domestic goods and services has grown strongly over the year reflecting cost pressures in some service industries, as well as increases in construction costs.

## **Outlook for the world economy**

- 2.11 The MYEFO forecasts were for a solid global recovery. Consistent with this assessment, the pace of the global recovery picked up in the second half of 2003 with the United States and East Asia growing strongly. Underlying this pick up are expansionary macroeconomic policies working in a low inflation environment.
- 2.12 However, the balance of risks around the medium-term outlook remains tilted to the downside, with the global recovery still over reliant on US growth.

## **Key risks to the economic outlook**

- 2.13 The risks around the near-term outlook are evenly balanced. However, a number of issues continue to weigh on prospects for stronger domestic growth and more broad-based world growth over the medium term.

*Domestic risks involve housing, the exchange rate and the rural sector*

- 2.14 A significant issue is how the current housing cycle plays out. Continued solid growth in both detached housing and renovation work is expected to be offset by a decline in medium-density housing in the first half of 2004. However, there is considerable uncertainty regarding the extent and timing of the expected downturn in medium-density dwelling investment.
- 2.15 The appreciation of the exchange rate has made trading conditions more difficult for some exporters and firms in import-competing industries. Moreover, the speed of the appreciation has made it harder for firms to find offsetting cost savings to maintain their competitiveness and profit margins.
- 2.16 Increased farm production, as rural communities recover from the drought over the near and medium term, is central to the forecast. Should this not happen, economic outcomes may be below those published in MYEFO.

*International risks involve sustainability of global recovery and high oil prices*

- 2.17 On the international side, the global recovery to date has been overly dependent on the United States. This overreliance on US growth and the deterioration of the US federal budget has contributed to the large US Current Account Deficit (CAD). In these circumstances, there is continuing concern over the sustainability of the CAD and how a subsequent correction may play out.
- 2.18 The price of oil, still high globally, presents a further risk to world growth.
- 2.19 Balanced against these downside risks in the short and medium term are a number of upside risks. For example, the housing market could hold up longer than expected and ongoing momentum of domestic demand could produce stronger growth than anticipated. Further, global imbalances could unwind in an orderly fashion and global recovery may gather strength and be more widespread than forecast.

- 2.20 More detailed information on the economic outlook can be found in the 2003-04 MYEFO.

## Company Profits

*The ACTU uses incomplete and inappropriate measures of company profits*

- 2.21 The ACTU submits that the economic performance of award-reliant industries lend support to its claim<sup>1</sup>. However, the ACTU has selected incomplete and inappropriate data with which to compare profits across industries<sup>2</sup>. These data cover incorporated businesses with 20 or more employees, and therefore, have been biased by trends to incorporation among businesses over time.
- 2.22 The inadequacies and biases associated with this approach are highlighted by the experience of the Accommodation, cafes and restaurants sector. In the restaurants and catering component of this industry, which accounts for about half of the industry's total employment, over 90 per cent of businesses have fewer than 20 employees.
- 2.23 Thus, the profit measure used by the ACTU leaves out a large section of this industry. According to Restaurants and Catering Australia, the overall average profit for a restaurant, cafe or caterer is just 1.5 per cent before tax<sup>3</sup>.
- 2.24 This low rate of profit indicates that the profitability of an important part of the Accommodation, cafes and restaurant industry is not as buoyant as indicated by the ACTU's submission.
- 2.25 A superior means of examining industry profits, in terms of capturing the contributions of small and unincorporated businesses, is to use gross operating surplus and gross mixed income, with the latter reflecting the profits of unincorporated enterprises<sup>4</sup>.

---

<sup>1</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraphs 2.9 and 2.10.

<sup>2</sup> ACTU Written Submission, Minimum Wages Case 2004, 28 January 2004, paragraphs 2.9 and 2.10

<sup>3</sup> Restaurants and Catering Australia website - <http://www.restaurantcater.asn.au/facts.asp>

<sup>4</sup> ABS, Australian System of National Accounts, Table 57 (Cat. No. 5204.0)

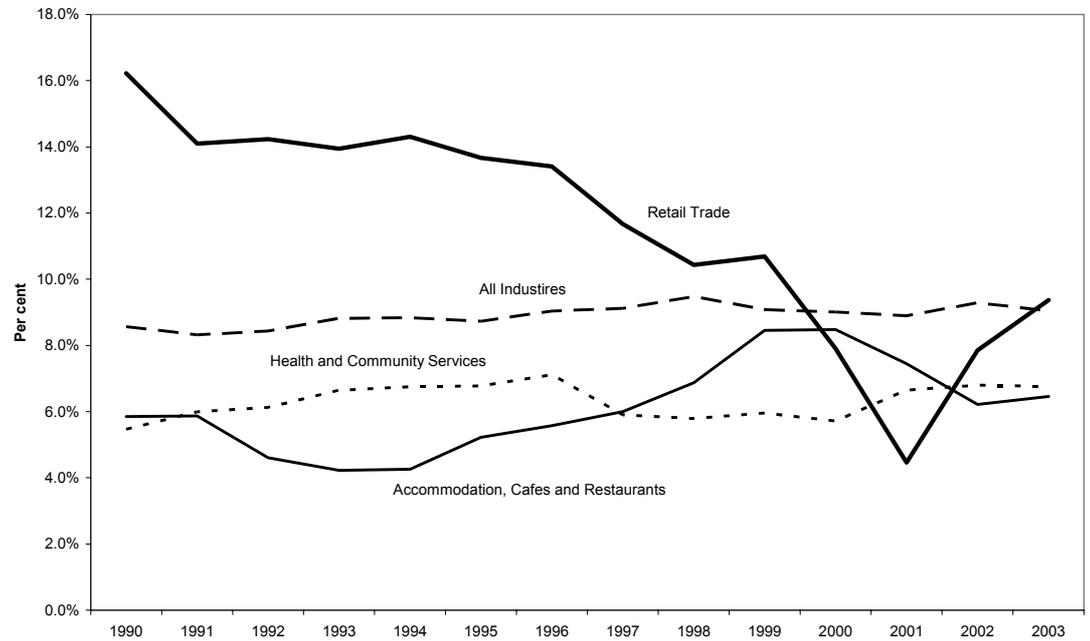
- 2.26 Based on these data, average annual nominal profit growth from 1995-96 to 2002-03 was 1.0 per cent for Retail, 6.6 per cent for Accommodation, cafes and restaurants and 5.3 per cent for Health and community services. The comparable figure for all industries was 5.9 per cent.
- 2.27 Nominal profit growth was stronger than the national average for all these award-reliant industries for 2002-03, particularly in retail where it increased by 14.3 per cent. This needs to be seen, however, as a recovery after the dramatic 26.7 per cent decline in retail profits over 1998-1999 and 2000-01. Despite the strong annual growth in profits for Accommodation, cafes and restaurants, it is still 8.0 per cent, in nominal terms, below its profit level in 1999-2000.
- 2.28 A major reason why total industry profits increase over time is due to the increased size of the industry. This can be taken into account when comparing profit levels over time by comparing profit levels with the amount of capital that has been invested in the industry to generate the economic activity, that is, by using the profit rate for the industry.
- 2.29 Chart 2.1 below shows industry profit, measured as gross operating surplus and mixed income minus capital consumption, as a proportion of end-year net capital stock<sup>5</sup>. This measure accounts for increasing capital stocks within industries.
- 2.30 Although the Retail sector has experienced a substantial increase in its profit rate since 2001, this increase has come from a historically low base and is still well below the rate experienced during the 1990s. The profit rate in Accommodation, cafes and restaurants has declined in recent years and in Health and community services has been relatively stable since 1990.

*A superior measure of profitability is to compare profit levels with the capital invested*

---

<sup>5</sup> Gross operating surplus is the excess of gross output over the sum of intermediate consumption, compensation of employees, and taxes less subsidies on production and imports. It is calculated before dividends, interest, royalties and land rent, and direct taxes payable, but after deducting the inventory valuation adjustment. Therefore Chart 2.1 would overestimate the rate of return for the industries analysed.

**Chart 2.1: Movement in profit rates for Accommodation, cafes and restaurants, Retail trade and Health and community services since 1990**



Source: ABS, Australian System of National Accounts (Cat No.6204.0)

## Profit and Wages Share

2.31 The ACTU asserts that the profit share of national income has remained steady over the last five quarters, with the wages share at near record lows<sup>6</sup>. This assertion is based on incomplete data. There are a number of ways of measuring the respective profit and labour shares of national income.

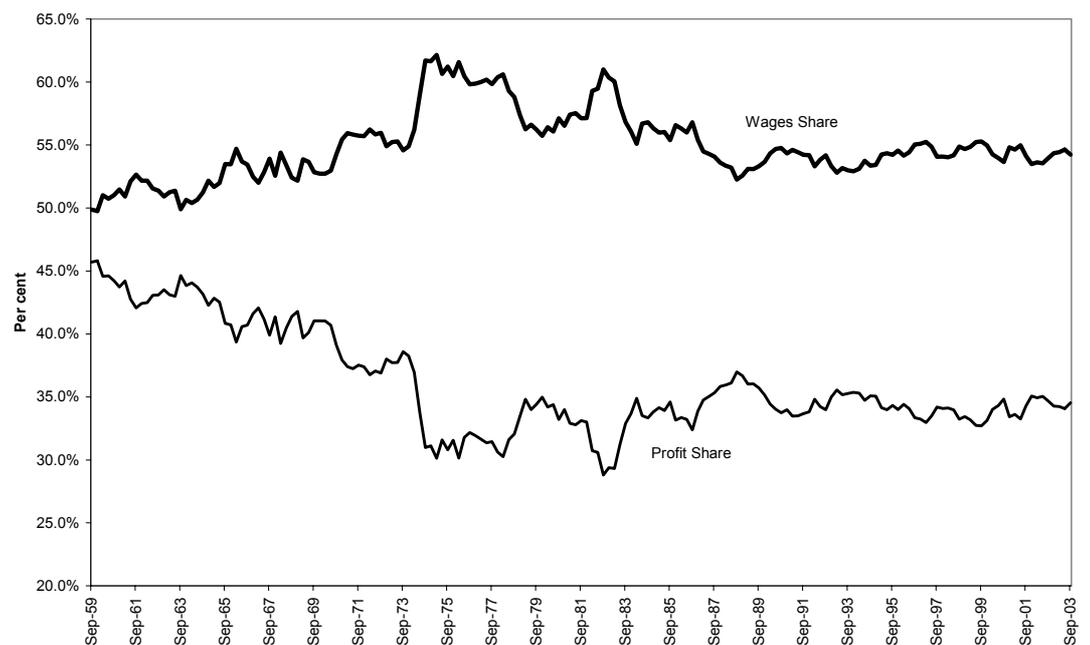
2.32 The method used by the ACTU in its submission is the ratio of Gross Operating Surplus of all corporations to Total Factor Income (TFI). This measure shows an upward trend in the profit share of TFI and a corresponding downward trend in the wages share since the mid 1970s. However, this trend is heavily influenced by a large proportion of unincorporated businesses becoming incorporated over this period.

<sup>6</sup> ACTU Written Submission, Minimum Wages Case 2004, 28 January 2004, paragraph 5.41.

2.33 A more accurate measure, used in Chart 2.2 below, comprises profits for all corporations but also includes Gross Mixed Income, which takes into account unincorporated businesses<sup>7</sup>. When the returns to unincorporated businesses are included a much flatter trend in the profit share can be seen.

2.34 The ACTU claims that the profit share of total factor income is at a record high of 25 per cent. This is misleading, as Chart 2.2 clearly shows. Profit shares, including unincorporated businesses, have hovered around 34 per cent since 1990, down from between 40 and 45 per cent in the 1960's.

**Chart 2.2: Movements in profit and wages shares of total factor income**



Source: Source: ABS, National Income, Expenditure and Product (Cat. No. 5206.0)

<sup>7</sup> Gross Mixed Income is not just a measure of the profits of unincorporated businesses. It is a mixture of the return to the owner's labour as well as a return to the owner's capital.

## Conclusion

- 2.35 The Australian economy continues to maintain solid economic growth. Labour market conditions are expected to be solid in 2003-04, with employment forecast to grow by around 1¾ per cent to the June quarter 2004, in line with the easing growth rate of non-farm GDP. Contributing to overall employment growth in 2003-04, rural and regional employment is forecast to pick-up sharply, in line with the expected rebound in farm production. The unemployment rate is expected to remain at around, or a little below, 5¾ per cent over the forecast horizon.
- 2.36 Though immediate risks to economic growth have diminished, medium-term risks remain tilted to the downside. These are associated with unbalanced growth in the global economy, the extent of any downturn in dwelling investment and effect of the exchange rate appreciation on exporters and domestic producers.
- 2.37 The movement of profit rates of the award-reliant industries, Retail, Accommodation, cafes and restaurants and Health and community does not support the view that their profitability is so strong that an increase of the size claimed by the ACTU will have no adverse employment or economic effects.

## SECTION 3: WAGES DEVELOPMENTS

### Introduction

*Award rates that should be the focus of the SNR have more than kept pace with general wages growth*

- 3.1 The increase of \$26.60 sought by the ACTU follows several large increases provided to award workers in recent years. The increase sought by the ACTU represents a 5.9 per cent increase at the FMW level and exceeds the level of the increases achieved by many workers on workplace agreements.
- 3.2 The Wage Cost Index (WCI) is the best measure with which to compare changes in award wages. Most of the other comparative measures used by the ACTU are earnings measures. Changes in earnings are affected by other factors such as changing industry/occupational mix of the workforce and changing job requirements.
- 3.3 The rationale underpinning the ACTU claim does not adequately reflect the relevant developments in the labour market. Award rates that ought to be the focus of the SNR – that is, rates up to and including the Tradesperson's rate – have more than kept pace with general wages growth over the last six years.

### Aggregate wages growth

*AWOTE is not a measure of wage movements. It is a measure of the movement of earnings*

- 3.4 The ACTU analysis of wage trends includes the use of measures such as Average Weekly Earnings (AWE), full-time Average Weekly Ordinary Time Earnings (AWOTE) and Average Compensation per Non-Farm Employee (AENA)<sup>1</sup>. These are not measures of wages movements but rather indicate the movement of earnings.

---

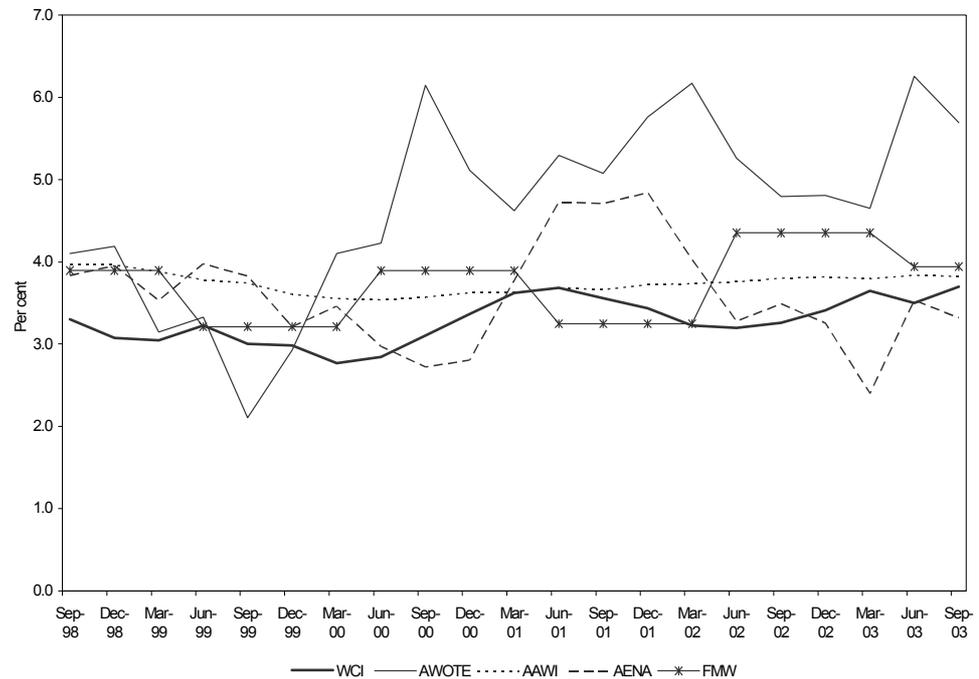
<sup>1</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraph 3.2.

- 3.5 These measures take into account changes in the nature of the work undertaken, that is, changes in occupational and industry composition, wage movements due to the increase in skill level or experience as well as changes in the wage rate for performing the same work at the same level.
- 3.6 Only the latter factor can be considered as relevant to a discussion of movements in wage rates. It is wage rates the Commission determines, not earnings.
- 3.7 If earnings measures are used as the basis for comparing changes in wages it may appear that the wage rates of award workers are increasing at a slower pace than the wage rates of other workers (refer to Chart 3.1).
- 3.8 A major factor pushing up the earnings measures is the increasing proportion of workers in higher paying occupations<sup>2</sup>. Since 1996 the number of full time employee Managers and administrators has grown by 30.5 per cent, and the number of Professionals by 26.6 per cent.
- 3.9 Over the same period the number of full time employee Elementary clerical, sales and service workers decreased by 1.4 per cent, while the number of Labourers and related workers increased by only 3.8 per cent. Award-reliant workers tend to be disproportionately represented in the lower paying occupations.

---

<sup>2</sup> ABS Supertable, E07.

**Chart 3.1: Annual wages and earnings growth - main indicators Sept 1998 to Sept 2003**



Source: ABS, Wage Cost Index (Cat No 6345.0), Average Weekly Earnings (Cat No 6302.0), Australian National Accounts (Cat No 5206.0); DEWR, Workplace Agreements Database.

*WCI is the only sound measure of wage movements*

3.10 The Commonwealth's submission in the previous two SNRs showed that the WCI provides the superior measure for comparing movements in wages<sup>3</sup>. Unlike the earnings measures it only measures the wages growth for performing the same work at the same level. This is analogous to examining the same award rate over time.

3.11 The Australian Bureau of Statistics (ABS) advises that:

*The Average Weekly Earnings series does not provide a reliable indicator of changes in wage rates, as it is significantly affected by compositional shifts in the workforce.*

<sup>3</sup> Commonwealth Submission, Safety Net Review – Wages 2001-02 (printed version), pages 26-29; Commonwealth Submission, Safety Net Review – Wages 2002-03, 26 February 2003, pages 18-21.

*Users who require a reliable measure of change in wage and salary rates should refer to the quarterly Wage Cost Index series (results published in Catalogue No. 6345.0), which directly measure changes in wage and salary rates each quarter<sup>4</sup>.*

- 3.12 The use of earnings based measures by the ACTU is erroneous and should be disregarded by the Commission. Table 2.4 of the ACTU submission, for example, presents average award earnings data that are effected by compositional change and therefore not relevant<sup>5</sup>. The WCI should be the measure of wage movements considered by the Commission.

## **Wage Cost Index**

*WCI increased by 3.7 per cent over the year to September 2003*

- 3.13 The seasonally adjusted WCI measure of total hourly rates of pay excluding bonuses rose by 3.7 per cent over the year to September 2003, up slightly from 3.5 per cent growth over the year to the June quarter, and 3.6 per cent growth over the year to the March quarter 2003.
- 3.14 The annual increase in the WCI was 4.7 per cent for the public sector and 3.2 per cent for the private sector over the year to September 2003.

## **Federal certified agreements**

*The AAWI for federal agreements in the September quarter 2003 was 4.1 per cent*

- 3.15 The average annualised wage increase (AAWI) for employees covered by federal certified agreements certified in the September quarter 2003 was 4.1 per cent, down from 4.3 per cent in the June quarter 2003 and up from 4.0 per cent in September 2002.

<sup>4</sup> ABS, Average Weekly Earnings (preliminary), November 2000 (Cat. No. 6301.0).

<sup>5</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, Table 2.4 page 19.

- 3.16 These quarterly data can be affected by the industry mix of the agreements certified in the quarter, and do not necessarily indicate rising wage pressures. Accordingly the comparison of AAWIs with movements in award wages should be used cautiously.
- 3.17 The AAWI for all agreements current at 30 September 2003 was 3.8 per cent. This figure has remained stable since the June quarter 2002.

## Executive remuneration

*The earnings growth of very high paid CEOs have no bearing on this case*

- 3.18 The ACTU submission refers to a review of executive salaries conducted by the *Australian Financial Review* (AFR) in November 2003<sup>6</sup>. This review indicates growth in remuneration of 47 per cent over the last year. It is important to note that this AFR review concentrates on the earnings growth of only the very highest paid CEOs.
- 3.19 This is not representative of earnings growth among senior managers more generally. As the ACTU submission indicates, the trend in executive pay increases more generally has been slower at between 4 and 5 per cent over the year to September 2003<sup>7</sup>.
- 3.20 Similarly the ACTU submission refers to the determinations of the Remuneration Tribunal in respect of federal parliamentarians and various public office holders<sup>8</sup>.
- 3.21 The remuneration of small highly specialised segments of the community provides no guide to the Commission in deciding the ACTU claim.

<sup>6</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraph 3.33.

<sup>7</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraph 3.39.

<sup>8</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraphs 3.40 to 3.46.

## Wage dispersion

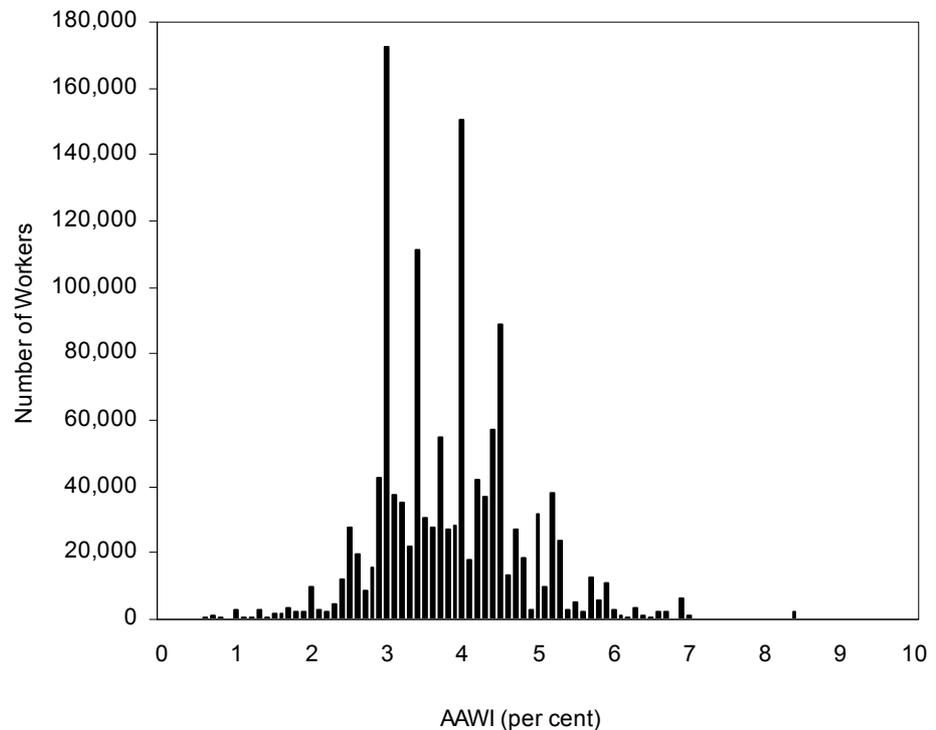
*Movements in the WCI and AAWIs do not reveal wide wage dispersion*

- 3.22 The ACTU submission at paragraphs 2.20 to 2.24 outlines the average increases award workers have received since 2000<sup>9</sup>. The submission states that ‘while award only workers received an average increase of 3.1 per cent as a result of last year’s decision, the rest of the community fared better’. This is a gross oversimplification, as workers experience a wide range of wage outcomes.
- 3.23 The data on AAWIs and the WCI used by the ACTU for comparison provide an indication of average wage increases enjoyed by workers. They do not show the wide dispersion that exists in changes in rates of pay.
- 3.24 If the Commission were to grant the ACTU’s claim, it would substantially exceed the increases in wages received by many workers, including the increases provided to many workers through workplace agreements.
- 3.25 The AAWI for employees covered by federal agreements current as at the September quarter was 3.8 per cent. As Chart 3.2 shows, however, many workers received increases of 3 per cent or less.
- 3.26 This dispersion of wage outcomes is to be expected where conditions vary at the workplace and local labour market level. For example, workers have different skill levels, there are different skill shortages, and productivity offsets may have been negotiated.

---

<sup>9</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraphs 2.20-2.24.

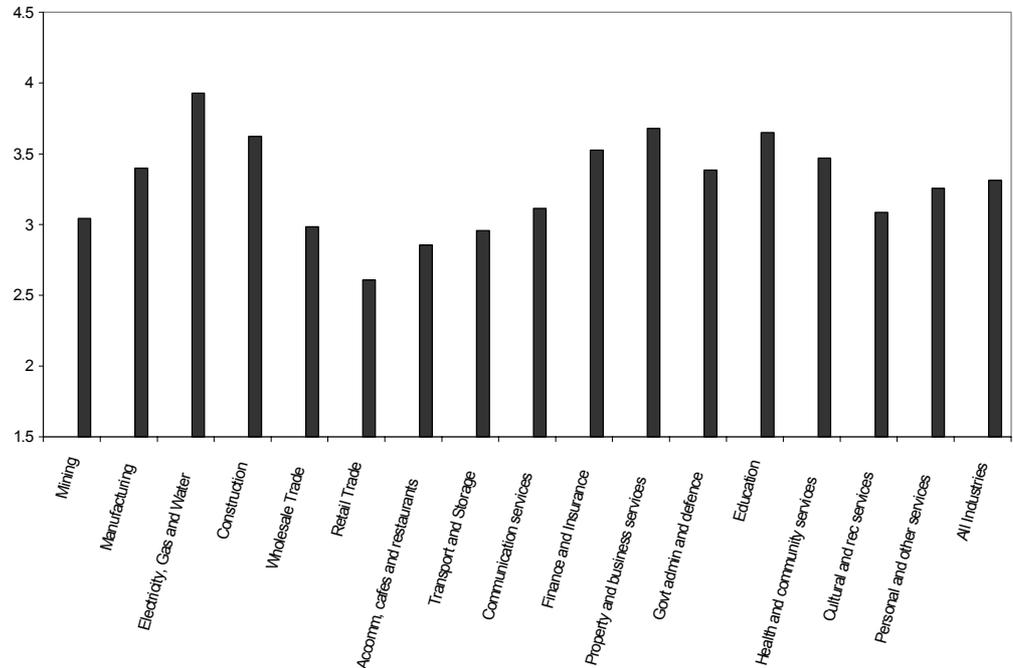
**Chart 3.2: Dispersion of Wage Outcomes under Federal CAs (current as at the September quarter 2003)**



Source: DEWR, Workplace Agreements Database

3.27 Chart 3.3 below shows the dispersion in average annual growth by industry over the six years to September 2003 as measured by the WCI. Wages growth has varied from 2.6 per cent annually in the Retail industry to 3.9 per cent in Electricity, gas and water.

**Chart 3.3: WCI by industry- average annualised growth, September 1997 to September 2003 (total hourly rates of pay excluding bonuses, original data)**



Source: ABS, Wage Cost Index (Cat No 6345.0)

3.28 By using only average changes in wages to support its claim, the ACTU oversimplifies the complicated nature of the labour market. The labour market is sub-divided according to skill levels, region and internal/external labour markets.

*The average rate of wage increase is not a measure of the capacity of workplaces to pay*

3.29 There is no basis for linking movements of award wages with average wage increases as is argued by the ACTU. The average rate of wage increases is not a measure of the capacity of individual workplaces to pay such increases.

3.30 The ACTU submission presents charts comparing growth in the output of selected industries and growth in the FMW, apparently positing a link between growth in the real value of the FMW and output in these industries<sup>10</sup>.

<sup>10</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, Figures 2.2-2.4 pages 12-13.

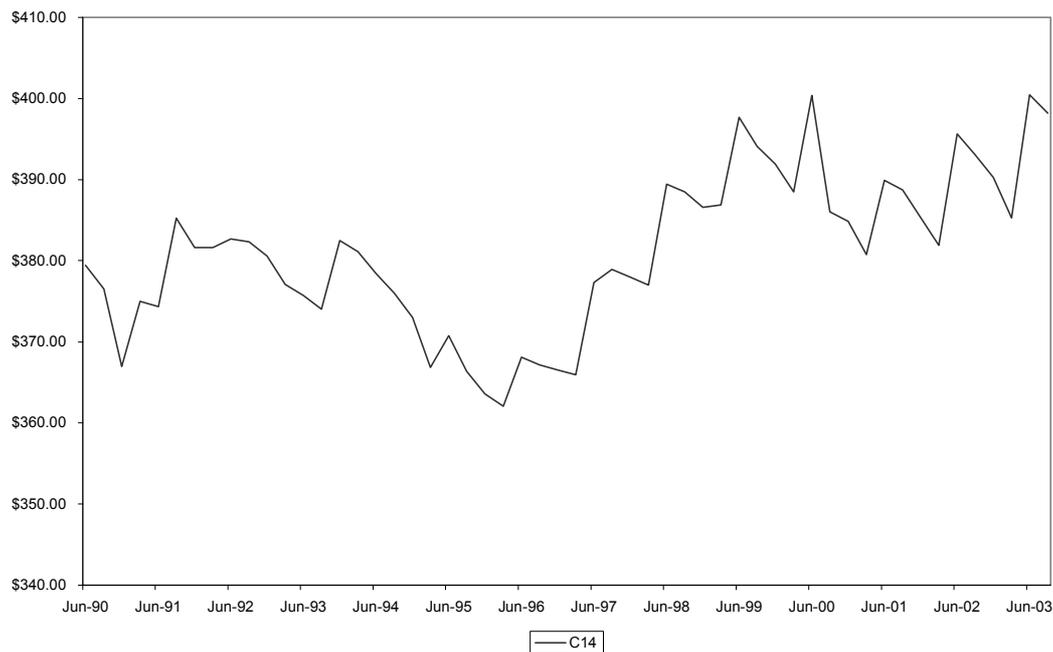
- 3.31 This is an inappropriate comparison, however, not least because of the weak link between changes in wage rates and changes in earnings, as noted elsewhere in this submission. It also takes no account of the change in industry employment, or the nominal growth in the wages of all workers in these industries which will have a bearing on the wages bills of these industries.

## **Changes in the value of the FMW and C10**

- 3.32 Since 1997 the cumulative wage increase from SNAs is \$99 at the FMW level, equivalent to an overall increase of 28.3 per cent. The Commission should take into account this sizeable increase over the longer term and not just the increase associated with this latest ACTU claim. Moreover the movements in award wages at both the FMW and C10 level have not lagged behind movements in wage rates.

*The sizeable increases in the FMW over time should be taken into account*

- 3.33 SNAs have already increased the real value of the FMW, so that it is now significantly higher than it was in June 1990, as shown in Chart 3.4 below.

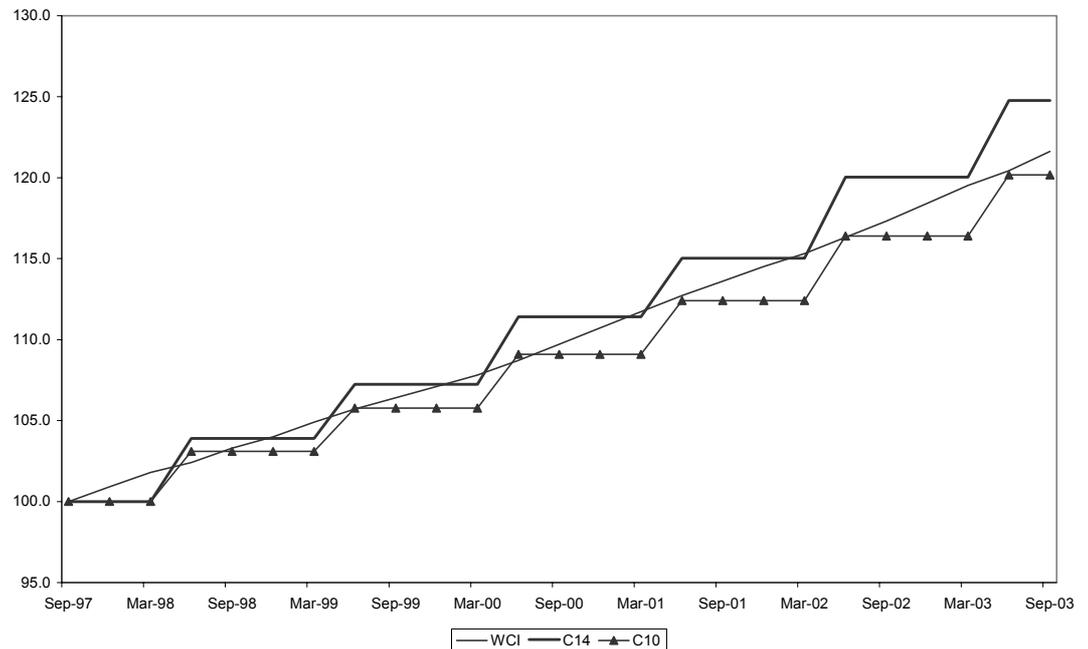
**Chart 3.4: Real value of FMW, June 1990 to September 2003**

Source: Department of Employment and Workplace Relations, June 1990-September 2003 (using June 2000 dollars).

Note: The FMW was determined by the Australian Industrial Relations Commission in the 1997 Safety Net Review decision. Prior to 1997, the C14 rate can be considered the 'de facto' FMW.

3.34 Chart 3.5 below compares changes over time in the WCI with changes in the FMW and C10.

**Chart 3.5: FMW, C10 and WCI, September 1997 to September 2003**



Source: ABS, Wage Cost Index (Cat No 6345.0); Metal Industries Award. Index (Sept 1997=100)

3.35 Over the year to the September quarter 2003, the FMW increased by 3.9 per cent, higher than the 3.7 per cent increase in the WCI.

3.36 In Figure 2.8 of the ACTU submission, the FMW and C10 are compared to AWOTE since 1983<sup>11</sup>. The major factor in the faster increase in AWOTE compared to the FMW and C10 over recent years has been the increasing proportion of higher skilled, higher paid workers which raises AWOTE. Therefore the relationship between the FMW, C10 and AWOTE has no relevance in considering the claim by the ACTU.

*Award coverage is concentrated at the Tradesperson level and below*

3.37 In paragraphs 2.16 to 2.19 of the ACTU submission the distribution of earnings for award workers are outlined and the statement is made that award workers are paid less than the rest of the community<sup>12</sup>.

<sup>11</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, page 20.

<sup>12</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraphs 2.16- 2.19.

- 3.38 This is to be expected given that the industry and occupation distribution of employment differs for award workers from the rest of the economy. Award coverage is disproportionately concentrated among Labourers and related workers and Elementary clerical, sales and service workers. Workers in these occupations tend to be relatively low paid regardless of whether they are paid under awards or through agreements<sup>13</sup>.

## Workplace agreements

*The Commission must encourage workplace agreements*

- 3.39 The Commission must take into account the full range of considerations set out in the WR Act when considering the ACTU's claim.
- 3.40 A central feature of the legislative framework is the obligation imposed on the Commission under section 88A(d)(i) of the WR Act to ensure that its functions and powers in relation to making and varying awards are performed and exercised in a way that encourages the making of agreements between employers and employees at the workplace or enterprise level.
- 3.41 In the 2002 SNR decision, the Commission recognised that increases in award wages have the potential to influence the speed at which agreement-making is taken up<sup>14</sup>.
- 3.42 This submission does not argue that SNAs alone explain the disparity of the levels of agreement making across industries. The Commission, in varying awards through the SNR, must encourage the making of agreements by not flowing-on wage increases workers have gained through agreement-making. SNAs need to be moderate and capped to ensure that the floor for workplace agreements is not continually raised.

---

<sup>13</sup> ABS, Employment, Hours and Earnings, May 2002, (Cat. No. 6306.0).

<sup>14</sup> Safety Net Review - Wages May 2002, Print PR002002, paragraph 162.

- 3.43 The pace at which agreement-making is spreading remains a factor the Commission must take into account in considering the ACTU claim.
- 3.44 The proportion of the workforce, in aggregate, relying on awards for their wages fell only a small amount by 2.7 percentage points from 23.2 percent in 2000 to 20.5 per cent in 2002<sup>15</sup>.
- 3.45 Movement in award reliance by industry presents a more mixed picture. The proportion of workers reliant on awards increased in Manufacturing, Construction and Communication. The proportion only fell by a small amount in Retail and Accommodation, cafes and restaurants, which are the most award-reliant industries.
- 3.46 The State and Territory Governments' submission points out that certified agreement-making is more prevalent in large businesses compared with small businesses<sup>16</sup>. Small businesses are seen as having greater difficulty in establishing enterprise agreements.
- 3.47 In response, it should be noted that the WR Act does not prescribe a particular type of agreement making, such as certified agreement making, but encourages agreement making at the workplace level that best suits the needs of employers and employees.
- 3.48 As Table 3.1 below shows, when one includes all types of agreement making, the proportion of small business employees paid through agreements is comparable with larger businesses, except for the very largest businesses.

---

<sup>15</sup> ABS, Employee Earnings and Hours, May 2000 and May 2002, Cat. No. 6306.0. Tables 25 and 24 respectively.

<sup>16</sup> State and Territory Governments' Written Submission, Minimum Wages Case, 4 February 2004, paragraph 154.

**Table 3.1: Method of setting pay by employer size, proportion of employees May 2002**

	Awards only	Collective agreements	Individual agreements
Under 20 employees	26.1	4.2	69.6
20 to 49 employees	32.4	13.9	53.7
50 to 99 employees	27.2	29.8	43.0
100 to 499 employees	22.2	42.8	35.0
500 to 999 employees	19.8	52.3	27.9
1000 and over employees	5.2	84.8	9.9

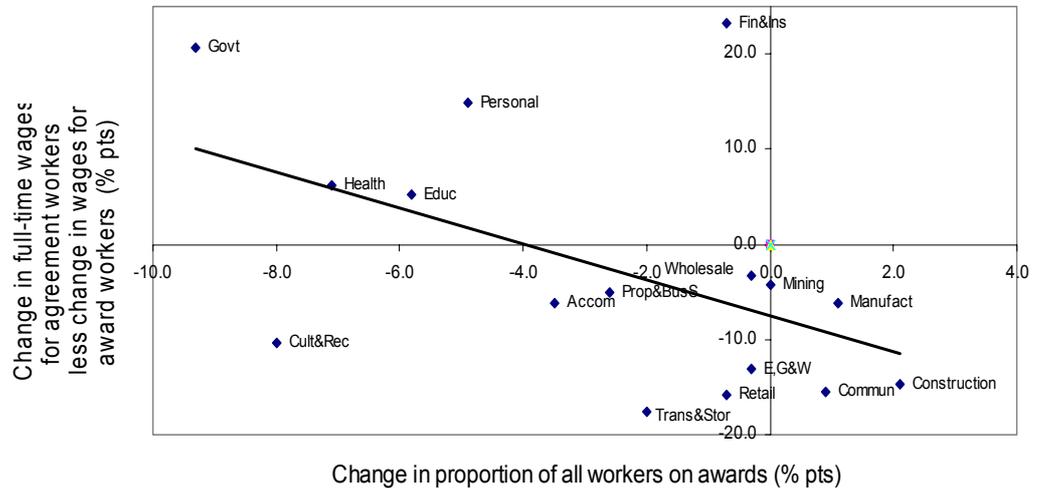
Source: ABS Employee Earnings and Hours (ABS Cat. No. 6306.0) May 2002, Table 27.

- 3.49 The proportion of workers on awards in businesses with fewer than 20 employees is not high at 26.1 per cent. Indeed in 2002 this proportion was lower than the proportion of workers in businesses employing 20 to 49 employees at 32.4 per cent and 50 to 99 employees at 27.2 per cent<sup>17</sup>.
- 3.50 The State and Territory Governments' submission therefore fails to explain why award reliance is higher in some industries than others.
- 3.51 Chart 3.6 below provides an explanation of some of the variation in the level and pace of change in award reliance between industries. The Chart shows that when the difference between the wages that can be earned through agreement-making and under awards is reduced there is a slowing in the pace of agreement-making.
- 3.52 Those industries where the wages of workers on agreements grew relatively fast compared to award wages had a greater reduction in award reliance compared to those industries where the increase in wages from agreement-making failed to outpace award wage increases. Table A.1 in Appendix A provides the results of a more robust statistical analysis of these data.

*The pace of agreement-making is increased where award wage growth is moderate*

<sup>17</sup> ABS, Employee Earnings and Hours, May 2002, Cat. No. 6306.0, Table 27.

**Chart 3.6: Relationship between the difference between changes in full-time wages under awards and agreements, and changes in award coverage by industry (2000 to 2002)**



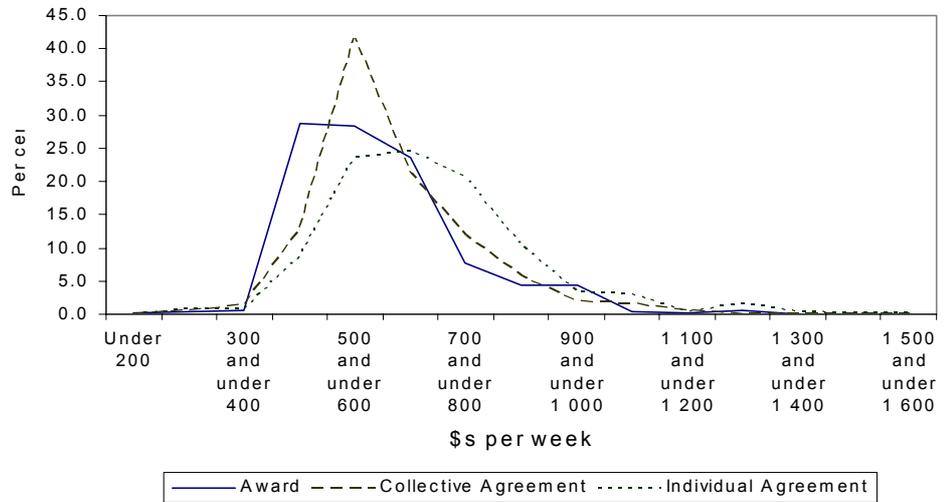
Source: ABS, *Employment Earnings and Hours*, unpublished data

- 3.53 The relationship between changes in award reliance and the relative increase in wages achieved through agreement-making and under awards by industry was estimated more rigorously.
- 3.54 This involved removing the effects of occupational compositional changes within industries that may have complicated the relationship described in Chart 3.6. It also allowed the introduction of other variables which contributed to the shifts in award reliance between industries. Table A.2 in Appendix A provides the results of this analysis.
- 3.55 The results of this more rigorous analysis indicate that the relative increase in wages achieved through agreement-making compared to those gained under awards has a highly statistically significant effect on the change in the level of award reliance of workers.

*In award-reliant industries there is little difference between the level of award and agreement wages*

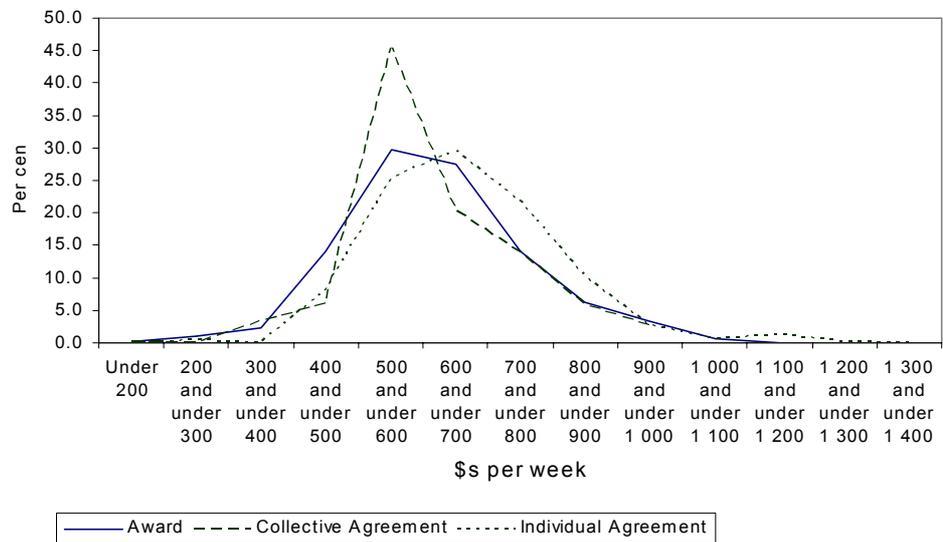
- 3.56 This significant effect can be explained by the small difference in the wage levels of workers paid through awards and those engaged in agreement-making in many industries. Even if award wages increase only slightly faster than wages achieved through agreements, the gap between the wage levels of workers paid through agreements and awards can be quickly reduced.
- 3.57 As a consequence, the incentive to engage in agreement – making is dampened as the gain in wages that can be achieved by entering an agreement is reduced.
- 3.58 The three charts below show that for the Retail, Accommodation, cafes and restaurants and Health and community services sectors there is a high degree of overlap in the distribution of wages by pay-setting method (Charts 3.7, 3.8 and 3.9 respectively).
- 3.59 The difference between the wages of those on awards and those on agreements is not large in these industries. This is particularly the situation in the award-reliant sectors of the economy. Accordingly the Commission must place emphasis on the importance of granting moderate and capped award increases to encourage the making of agreements at the workplace level.

**Chart 3.7: Distribution of Employment by Full-time Wage by Method of Setting Pay, Retail 2002**



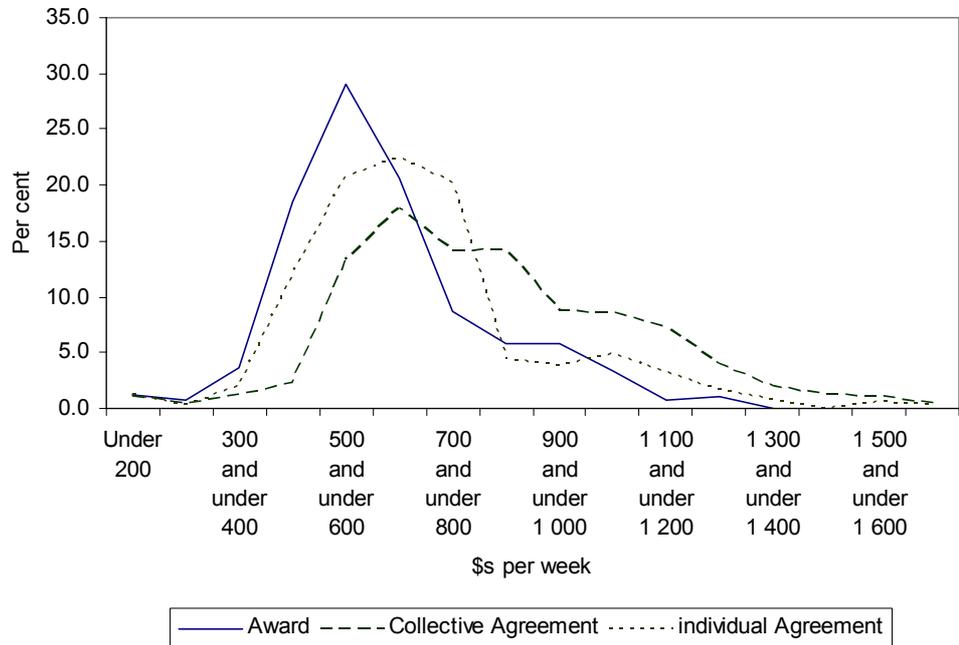
Source: ABS, *Employment, Earnings and Hours, 2002 unpublished data*

**Chart 3.8: Distribution of Employment by Full-time Wage by Method of Setting Pay, Accommodation, cafes and restaurants 2002**



Source: ABS, *Employment, Earnings and Hours, 2002 unpublished data*

**Chart 3.9: Distribution of Employment by Full-time Wage by Method of Setting Pay, Health and community services 2002**



Source: ABS, Employment, Earnings and Hours, 2002 unpublished data

## Wage increases under awards and agreements

*It is not appropriate for award rates to be adjusted on the basis of market rates*

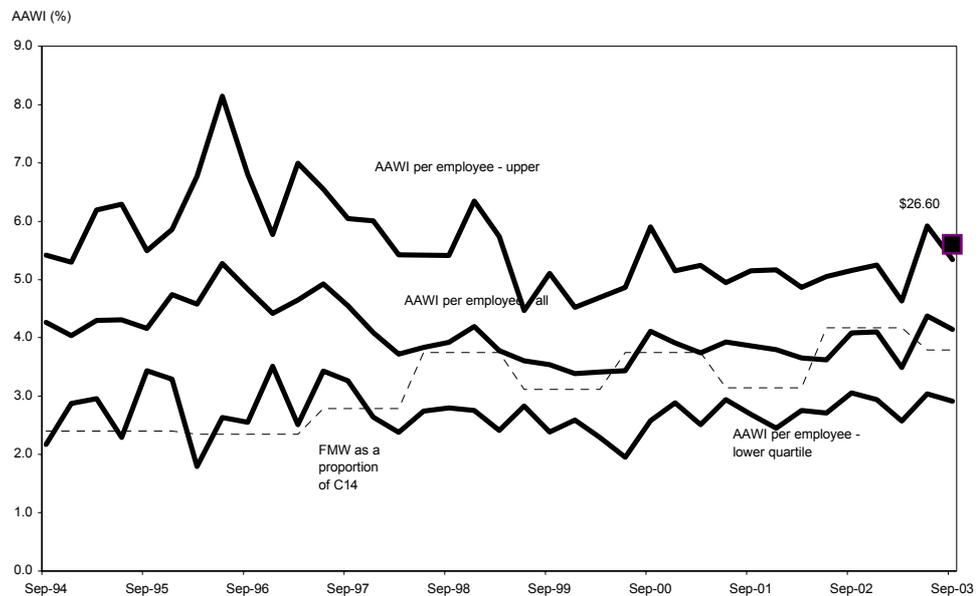
3.60 It is not appropriate that award rates be adjusted on the basis of market rates. The WR Act emphasises the clear separation between the minimum protections provided by the award system and the wage outcomes achieved by workplace bargaining. This issue was addressed in the Commonwealth Submission for the SNR 2001-2002<sup>18</sup>.

3.61 A time series of previous SNAs as a percentage of C10 and the FMW are provided in Charts 3.10 and 3.11 below. The Charts also show the ACTU’s proposed increase as a proportion of C10 and the FMW.

<sup>18</sup> Commonwealth Submission, Safety Net Review – Wages 2001-2002 (printed version), paragraph 1.20

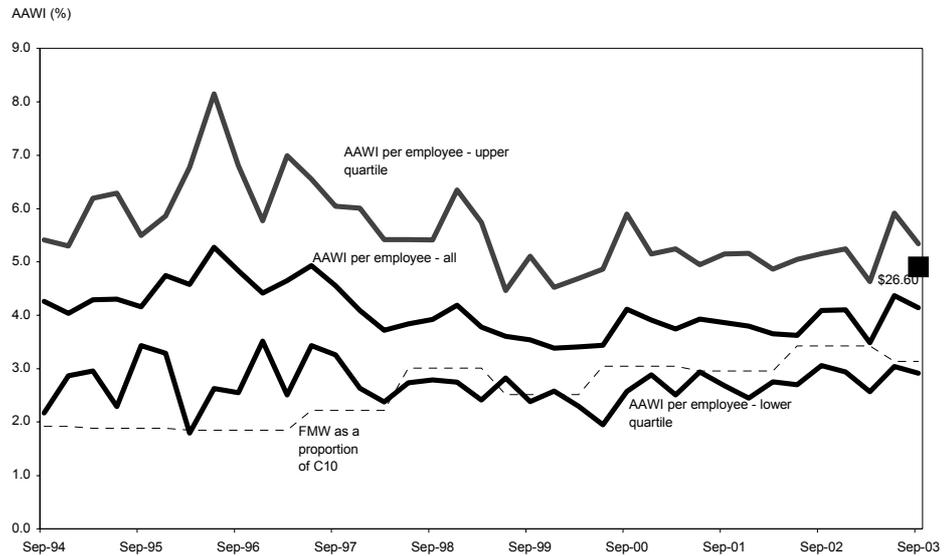
3.62 If the Commission were to grant the ACTU's claim it would exceed the wage rises being achieved by many workers through federal agreements. Both figures show that SNAs granted over time have generally provided higher percentage increases than the AAWIs for the lowest quartiles. The industries with the most award-reliant workforces such as Accommodation, cafes and restaurants and Retail tend to be represented in the lowest quartiles.

**Chart 3.10: A comparison of AAWIs for federal wage agreements, highest and lowest quartiles and safety net adjustments and the ACTU's claim as a proportion of C14**



Source: DEWR, Workplace Agreements Database

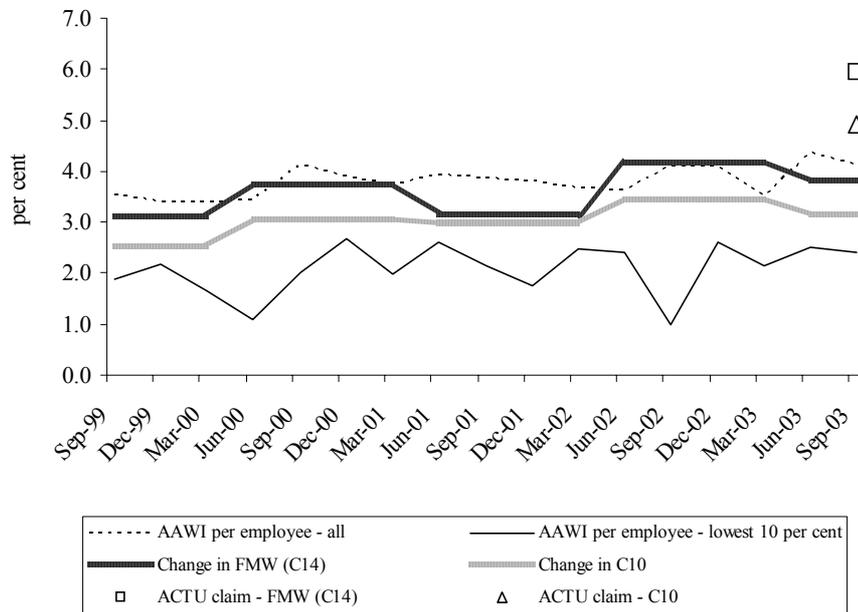
**Chart 3.11: A comparison of AAWIs for federal wage agreements, highest and lowest quartiles and safety net adjustments and the ACTU's claim as a proportion of C10**



Source: DEWR, Workplace Agreements Database

- 3.63 Chart 3.12 expands on this analysis to demonstrate more clearly the adverse impact a large SNA could have on the incentive to bargain for award-reliant workers
- 3.64 The Chart shows the AAWIs for the 10 percent of employees with the lowest AAWIs for all federal agreements certified in the quarter. The significance of the lowest decile of AAWIs per employee is that over 61 per cent of these employees were in the services sector in the September quarter 2003.
- 3.65 As mentioned above, it is the services sector that continues to exhibit high levels of award coverage. The three industries with the highest proportion of employees covered by awards, Accommodation, cafes and restaurants, Retail and Health and community services constitute more than 40 percent of the lowest decile of AAWIs per employee covered by federal enterprise agreements.

**Chart 3.12: A comparison of AAWIs for federal agreements, lowest decile and safety net adjustments and the ACTU's claim as a proportion of C14 and C10**



Source: DEWR, Workplace Agreements Database.

## Conclusion

- 3.66 The aggregate level of wages growth has been moderate over the past year. The aggregate measures of wages growth, however, hide dispersion in wage outcomes. Many workers receive increases considerably less than the average increase.
- 3.67 Award wages have not lagged behind movements in wage rates in general.
- 3.68 If the Commission were to grant the ACTU's claim, it would exceed the increases in wages received by many workers, including increases achieved in federal workplace agreements.
- 3.69 While many factors affect the move from awards to agreement-making an important factor is the difference in the size of the increase between wages that can be achieved under awards and through workplace bargaining.

- 3.70 A large award increase would place a higher floor under the range of wage outcomes that could be achieved through bargaining.
- 3.71 The Commission should place importance on the impact that SNAs may have on the encouragement of workplace bargaining and grant only a moderate and capped increase.

## SECTION 4: PRODUCTIVITY AND WORKPLACE BARGAINING

### Introduction

*Workplace bargaining encourages productivity growth*

- 4.1 Australia has experienced strong gains in labour productivity since 1990. The turnaround in Australia's productivity performance has been driven by a wide-ranging structural reform programme. The move away from centrally determined wages and conditions and toward agreement making at the workplace level has been central to the reform agenda.
- 4.2 Analysis presented in the Commonwealth Treasury's *Intergenerational Report*, released in conjunction with the 2002-03 Budget, emphasised the need for continued productivity growth to maintain growth in per capita income and hence, living standards.
- 4.3 The Treasury projects, based on no adjustments to policy, that future economic growth will slow relative to the outcomes achieved over the last decade, primarily reflecting slower employment growth but also lower productivity growth. Employment growth is expected to slow due to a lower rate of population growth and declining labour force participation rate due to population ageing. Productivity growth, following the strong growth recorded in the 1990s, is projected to return to its 30-year average<sup>1</sup>.
- 4.4 Despite the recent improvement in productivity, Australia remained 14<sup>th</sup> among OECD countries in GDP per hour worked in 2001 and had a labour productivity level at only 83 per cent of that of the USA<sup>2</sup>. Therefore, there is still considerable room for improvement.

---

<sup>1</sup> Treasury, *Intergenerational Report 2002-03*, Commonwealth of Australia, 2002.

<sup>2</sup> D Parham, *Productivity Growth in Australia: Are We Enjoying a Miracle?* Paper presented at the Melbourne Institute/The Australian conference, Towards Opportunity and Prosperity, Melbourne, 4-5 April 2002.

## Productivity growth in award-reliant industries

- 4.5 Both the ACTU's and the State and Territory Governments' submissions present a picture of strong productivity growth in award-reliant industries such as Accommodation, cafes and restaurants, Retail trade and Health and community services in 2002-03<sup>3</sup>. As Chart 4.1 shows productivity figures 'bounce around' over single years as they are heavily influenced by short term economic conditions. Therefore, underlying productivity trends are best examined over a longer time period.
- 4.6 The ACTU does include a longer-term analysis of productivity growth in the three award-reliant industries for the period 1996 to 2003<sup>4</sup>. The ACTU fails to acknowledge that productivity growth in these three industries is below the rate recorded for all industries of 17.1 per cent<sup>5</sup>.
- 4.7 Further, as shown in Chart 4.1 below, the starting period for the ACTU's analysis was a near-low point for productivity in the Accommodation, cafes and restaurants and Retail trade industries. Strong productivity growth is easier to record off a low base.

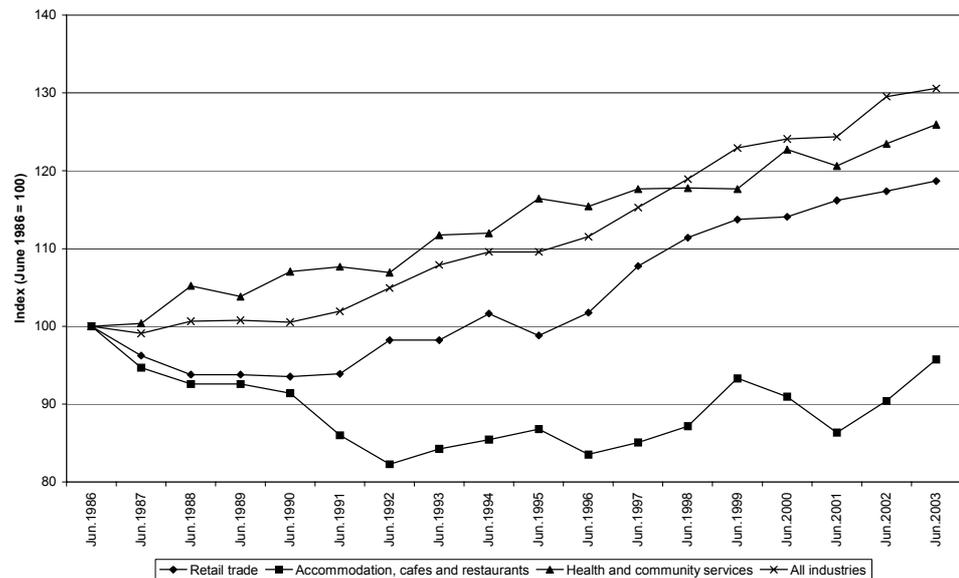
*The ACTU's submission does not identify the impact of awards on productivity*

<sup>3</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraph 2.13.

<sup>4</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraph 2.14.

<sup>5</sup> ABS AusStats, 5204.025.

**Chart 4.1: Gross product per hour worked, selected industries, 1986 to 2003**



Source: ABS AusStats, 5204.025.

- 4.8 The State and Territory Governments' submission presents evidence from the 1995 AWIRS suggesting very few respondents at that time did not believe the award system worked well<sup>6</sup>. It should be noted that this survey pre-dates the introduction of the *WR Act*.
- 4.9 Nonetheless, AWIRS 95 data show a desire on the part of managers to enter into agreements to improve productivity. The survey found that the most common reason for entering agreements was to improve productivity (53 per cent of respondents) while the same percentage reported that their workplace agreement had increased productivity.
- 4.10 The Commission concluded in its 2003 SNR decision that SNAs were not detrimental to productivity growth and that there was no necessary association between award coverage, SNAs and productivity growth<sup>7</sup>.

<sup>6</sup> State and Territory Governments' Written Submission, Minimum Wages Case, 4 February 2004, paragraph 157.

<sup>7</sup> Safety Net Review – Wages May 2003, Print PR002003, paragraphs 180 and 182.

*Workplace bargaining has played a strong role in the acceleration of Australia's productivity growth*

- 4.11 It is difficult to disentangle the various influences of each of the microeconomic reforms on productivity. The timing of Australia's acceleration in productivity growth, however, suggests that workplace bargaining played a strong role in this turnaround.
- 4.12 Parham(2003) has found that other microeconomic reforms such as the floating of the dollar and reduction of trade barriers were well under way by the 1990s and that the timing of the introduction of workplace bargaining coincides with the productivity improvements of the last decade or so<sup>8</sup>.
- 4.13 Evidence at both the macro and workplace level is accumulating to demonstrate that reliance on centrally determined wages and conditions through the award system is harming productivity growth. In contrast, firms that engage in setting wages and conditions matters at the workplace level are experiencing higher productivity growth.
- 4.14 Last year, the Commonwealth presented evidence of the strong negative relationship between award reliance and productivity<sup>9</sup>. The approach taken by the Commonwealth received considerable criticism from both the ACTU<sup>10</sup> and the State and Territory Governments'<sup>11</sup>. This year, the Commonwealth presents results from a more comprehensive economic model of the relationship between award reliance and productivity which answers these criticisms.

*There is a strong positive relationship between the fall in award reliance and increased productivity*

- 4.15 The most effective way of testing the relationship between award reliance and productivity growth is by examining changes in award reliance and productivity growth at the industry level since the introduction of enterprise bargaining in 1990.

<sup>8</sup> Parham, D. *Sources of Australia's Productivity Revival*, 2003.

<sup>9</sup> Commonwealth Submission, Safety Net Review – Wages, 26 February 2003, paragraphs 8.24 and 8.25.

<sup>10</sup> Safety Net Review - Wages May 2003, transcript, 31 March 2003, PN454 to PN456.

<sup>11</sup> Safety Net Review - Wages May 2003, transcript, 1 April 2003, PN739 to PN748.

- 4.16 Data showing the change in award reliance by industry between 1990 and 2002 are only available for seven industries due to ABS data limitations<sup>12</sup>. There is, however, a strong relationship between the decline in award reliance and productivity growth among these seven industries (see Chart 4.2 below). Nearly 60 per cent of the difference in the rate of productivity growth between these seven industries is explained by the change in award coverage (see Table A.3 in Appendix A).
- 4.17 In its SNR 2003 decision, the Commission noted that different sectors have different capacities to experience productivity growth<sup>13</sup>. Broadly speaking, labour productivity growth is influenced by overall efficiency in factor use, known as multi-factor productivity, and changes in the capital-labour ratio<sup>14</sup>.
- 4.18 For example, an increase in the capital-labour ratio, also called capital deepening, raises labour productivity. When accounting for trends in labour productivity over time it is important to hold changes in the capital-labour ratio constant to account for this 'capital deepening'.

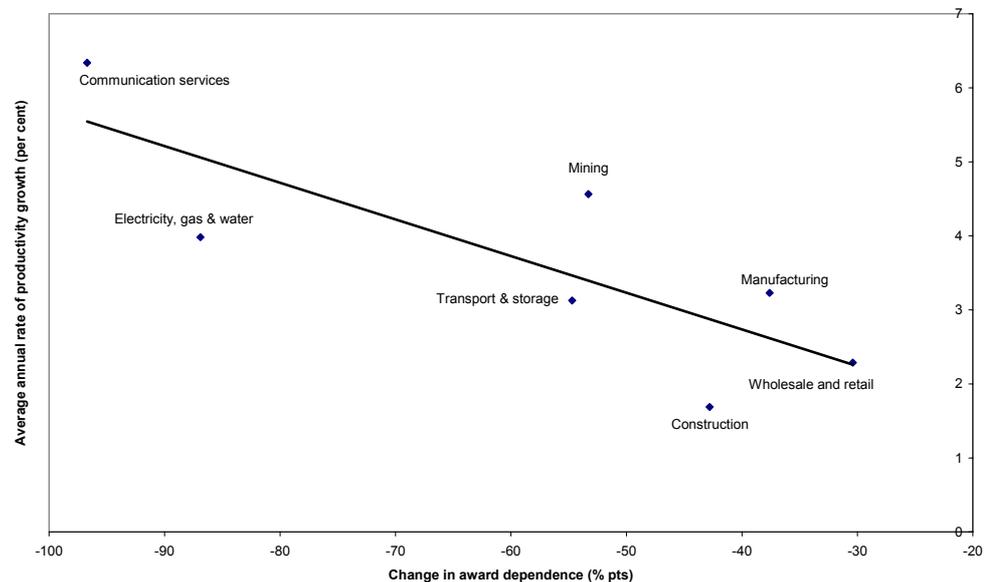
---

<sup>12</sup> The ABS did not publish official estimates of award coverage between 1990 and 2000.

<sup>13</sup> Safety Net Review - Wages May 2003, Print PR002003, paragraph 181.

<sup>14</sup> Productivity Commission, *Microeconomic Reforms and Australian Productivity: Exploring the Links, Volume 1: Report*, Research Paper, 1999, Ausinfo, Canberra, page 27.

**Chart 4.2: Labour productivity growth 1990 to 2003 and change in award coverage 1990 to 2002 by industry.**



Source: ABS AusStats, 5204.025; ABS, Award Coverage, May 1990 (ABS Cat. No. 6315.0) unpublished data.

4.19 It is difficult to gain a direct measure of the intrinsic capacity for industries to experience productivity growth from all other causes but proxy measures can be derived. A measure which can capture whether an industry could be categorised as an intrinsically 'high productivity growth industry' or 'low productivity growth industry' is the industry's average productivity level over the period 1986 to 1990. This period was immediately prior to the move towards greater agreement making at the workplace level.

4.20 This assumption is justified as an industry's average productivity level is the accumulation of all its past productivity growth. Under this approach high average productivity level industries include Mining, Electricity, gas and water and Finance and insurance. Low average productivity level industries include Retail trade, Communication services and Wholesale trade.

- 4.21 Econometric testing confirms that there is a positive and statistically significant relationship between the average annual change in productivity between 1990 and 2003 and average productivity levels in the prior period (1986 to 1990)<sup>15</sup>. Therefore, as suggested by the Commission, different industries do indeed have different capacities for productivity growth. Capital deepening and an industry's intrinsic capacity for productivity growth were found to both influence productivity growth outcomes.
- 4.22 A well specified economic model of the relationship between productivity growth and award reliance at the industry level will account for these two factors. The reduction in award reliance was found to have had a statistically significant positive relationship with productivity growth in the presence of these other variables.
- 4.23 Industries with high levels of award reliance had lower productivity growth rates regardless of whether they can be considered intrinsically high or low productivity industries (see Table A.4 in Appendix A). High levels of award reliance retards productivity growth independently of these factors.
- 4.24 The data in Table A.4 show that a 10 percentage point reduction in award reliance in an industry between 1990 and 2002 was associated with an increase of the average annual productivity growth in the industry between 1990 and 2003 of 0.5 percentage points. A corollary of this finding is that in all industries there are productivity gains that can be made if workers and employers engage in workplace bargaining.

---

<sup>15</sup> Average productivity in the period prior to 1990 is the appropriate measure to use here because it captures all of the productivity growth that occurred prior to the introduction of enterprise bargaining and therefore provides a historical base from which the 1990 to 2003 labour productivity cycle can be examined. In this analysis, each industry is weighted according to the number of hours worked which, appropriately, gives weight to those industries with the highest share of employment.

- 4.25 Due to ABS data limitations, a number of important service industries such as Accommodation, cafes and restaurants, Cultural and recreational services and Finance and insurance are excluded from this analysis. The Retail sector is included but it is combined with the Wholesale sector.
- 4.26 Without the inclusion of all of the available industry groups, the services sector would be particularly under-represented in the analysis. This has important implications for conclusions of the impact of award reliance on productivity as these industries' workforces have relatively high award reliance.
- 4.27 To address this concern another modelling exercise was undertaken, employing the level of award reliance as at 2002 as the one of the explanatory variables. This allowed the inclusion of the missing service industries and the disaggregation of the Retail and Wholesale industry.
- 4.28 This means that 11 industries can be analysed. If the same results are found this will provide some added confidence to the findings presented above. The extent of award reliance of an industry's workforce in 2002, average productivity and capital-labour ratio were the variables included in the analysis for the reasons discussed above (see Table A.5 in Appendix A).
- 4.29 The level of award reliance in 2002 was found to be highly significant in explaining the differences in industries' productivity growth even after taking into account the effects of capital deepening and the intrinsic capacity for productivity growth as measured by average levels of productivity.
- 4.30 A 10 percentage point reduction in award reliance in 2002 in an industry was found to be associated with a 0.6 percentage point rise in the industry's average annual productivity growth between 1990 and 2003 (see Table A.5 in Appendix A).

- 4.31 The results confirm that all industries, regardless of whether they are considered ‘high’ or ‘low’ productivity industries have the capacity for productivity growth.
- 4.32 A number of studies of productivity in the service sector support the results of the regression exercise discussed above and show that there is capacity for further productivity growth in all service industries.
- 4.33 A cross-country study by McLachlan, Clark and Monday from the Productivity Commission used OECD and ABS data to benchmark the performance of Australia’s service industries against other OECD countries for the period 1995-1998<sup>16</sup>.
- 4.34 Despite the productivity improvements during this period, the authors found that Australia’s electricity, gas and water industries, community, social, personal and other services, wholesale and retail trade, restaurants and hotels and finance and insurance and property and business services all had productivity levels below the OECD average. The authors concluded, therefore, that Australia’s service industries have the scope for significant productivity improvement.

## Workplace bargaining

*Firm-level data confirms the strong link between enterprise bargaining and productivity*

- 4.35 Apart from looking at the macroeconomic relationship between enterprise bargaining and productivity, it is important to examine this relationship at the firm level to identify ways in which individual firms are tailoring agreements to improve productivity.

---

<sup>16</sup> R McLachlan, C Clark and I Monday, *Australia’s Service Sector, A Study in Diversity*, Productivity Commission Staff Research Paper, 2002.

- 4.36 A number of studies have previously been presented to the Commission that found that workplaces that enter into agreements regularly experience significant productivity gains, even in those industries traditionally viewed as 'low productivity industries'<sup>17</sup>.
- 4.37 The Commission identified the wholesale<sup>18</sup>, retail industries and hospitality sectors as areas of high award reliance and high productivity growth in last year's decision<sup>19</sup>. Similarly, as noted earlier, the ACTU argues in its written submission that productivity growth has been high in award reliance service industries.
- 4.38 Accordingly it is worth detailing the case studies undertaken by the Productivity Commission within the Wholesale trade and Retail trade industries to ascertain what has driven that productivity improvement. Unfortunately the hospitality sector was not included in the case studies<sup>20</sup>.
- 4.39 The Productivity Commission confirmed that these two industries were able to turn around their mediocre growth of the 1980s to much stronger growth during the 1990s, particularly in regard to Wholesale trade. Importantly, enterprise bargaining was found to have a fundamental influence on improvements in productivity growth.
- 4.40 Industry sources quoted in the Wholesale trade studies reported that moving to enterprise-based from industry-based work conditions led to increased flexibility in hours worked, better matching of work hours to receipt and delivery times, reductions in demarcation and a more intensive use of capital.

---

<sup>17</sup> Commonwealth Submission, Safety Net Review - Wages 2002-2003, paragraphs 8.26-8.33.

<sup>18</sup> This is despite the fact that only 11.7 per cent of Wholesale trade employees were award-reliant in May 2002.

<sup>19</sup> Safety Net Review – Wages, May 2003, Print PR002003, paragraph 182.

<sup>20</sup> A Johnston., D Porter, T Cobbold and R Dolamore, *Productivity in Australia's Wholesale and Retail Trade*, Productivity Commission Staff Research Paper, Ausinfo, Canberra, 2000.

- 4.41 Each of these developments were said to have had a positive impact on productivity.
- 4.42 Similarly, in Retail trade, enterprise bargaining was used to reorganise the workplace to improve customer service, increase job security, improve career opportunities and hence, increase productivity.
- 4.43 These results are consistent with findings from other case studies undertaken by the Productivity Commission into productivity developments in the whitegoods, automotive, rail and clothing and footwear industries<sup>21</sup>.
- 4.44 Other workplace-level studies confirm the link between productivity and enterprise bargaining. Fry, Jarvis and Loundes found that organisations adopting workplace relations reform, such as entering agreements with their workers, reported significantly higher levels of self-assessed labour productivity relative to their competitors<sup>22</sup>.
- 4.45 The Commission in last year's decision referred to findings of the UK Low Pay Commission which found that increasing the UK national minimum wage had no significant effect on productivity<sup>23</sup>.
- 4.46 With regard to overseas comparisons, it is worth noting that the UK Low Pay Commission was drawing its conclusion from a study by Forth and O'Mahony (2003) who were examining the impact of the introduction of the National Minimum Wage in 1999 on productivity the following year<sup>24</sup>. This is far too short a period to analyse an issue such as productivity growth which is affected by a multitude of factors.

---

<sup>21</sup> Productivity Commission, *Microeconomic Reforms and Australian Productivity: Exploring the Links, Volume 2: Case Studies*, Research Paper, 1999, Ausinfo, Canberra.

<sup>22</sup> T Fry, K Jarvis, and J Loundes, *Are Pro-Reformers Better Performers?* Melbourne Institute Working Paper No. 18/02, September 2002.

<sup>23</sup> Safety Net Review - Wages, May 2003, Print PR002003, paragraphs 182 and 184.

<sup>24</sup> J Forth and M O'Mahony, *The Impact of the National Minimum Wage on Labour Productivity and Unit Labour Costs*, 2003, National Institute of Economic and Social Research.

- 4.47 Moreover the Australian and UK situations are quite different with the SNAs in Australia affecting all levels of wage earners not just those on the minimum wage. Also, the SNAs affect one fifth of the Australian workforce that is award-reliant compared with the National Minimum Wage which affected 6 per cent of the UK workforce.
- 4.48 It is noteworthy that the UK Low Pay Commission found that some low paying sectors had implemented innovative measures to deal with the labour cost increases arising from minimum wage adjustments. The Commonwealth encourages such action in Australian workplaces which is consistent with workplaces moving away from reliance on awards for determining wages and conditions.
- 4.49 Across the board, evidence from individual businesses demonstrates that enterprise bargaining has been crucial to Australia's improved productivity performance of the 1990s. This is consistent with the econometric analysis presented above. Productivity growth has a positive relationship with workplace bargaining while award reliance reduces productivity. These results hold across all industries, not just those with traditionally high productivity levels.

## Impact on labour costs

*Unit labour costs in the three most award-reliant industries have increased substantially*

- 4.50 As shown in the regression exercises above, reliance on the award system has a negative impact on productivity growth. As a result any large increase in award wages that are not linked to equivalent productivity growth add substantially to the costs of employers.
- 4.51 The ACTU submission asserts that productivity growth in the three most award-reliant industries has "outpaced the growth in real award wages. As a result real unit labour costs have fallen<sup>25</sup>."

---

<sup>25</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, paragraphs 2.5 and 2.14.

- 4.52 The ACTU has compared growth in real wages with productivity growth. The ACTU appears to deflate C14 by the CPI rather than price movements of the specific good and services produced by those industries.
- 4.53 An alternative method which does not suffer from this shortcoming is to examine movements in nominal wages, given that these represent the actual wages paid by employers. Nominal unit labour costs will increase in a given industry when nominal wage increases are not matched by productivity growth.
- 4.54 Nominal unit labour costs are measured as the ratio of nominal hourly wages to average hourly productivity. The increase in nominal unit labour costs in an industry can be found by subtracting the percentage increase in labour productivity from the nominal percentage increase in wages.
- 4.55 It should be noted also that this approach assumes that within industries the rate of productivity growth for award-reliant workplaces is the same as that for workplaces that engage in bargaining. As demonstrated in the previous section this will not be the case – productivity growth will generally be slower in award-reliant workplaces so the growth in unit labour costs will be greater.
- 4.56 Table 4.1 shows that, over the period 1996-2003, nominal unit labour costs have increased substantially in the three most award-reliant industries based on both the FMW and C10 level.
- 4.57 Employers choose to respond to increasing nominal unit labour costs by allowing profits to fall, increasing the prices of their products and services or reducing their wages bill by reducing the number of award workers or some combination of these measures.

**Table 4.1: Increase in nominal unit labour costs in the Accommodation, cafes and restaurant, Retail trade and Health and community services as a result of SNAs over the period 1996-2003**

Industry	C14 – FMW			C10		
	Nominal increase in wages	Productivity growth	Increase in nominal unit labour costs	Nominal increase in wages	Productivity growth	Increase in nominal unit labour costs
Accommodation, cafes and restaurants	28.3%	14.6%	13.7%	22.9%	14.6%	8.3%
Retail trade	28.3%	16.6%	11.7%	22.9%	16.6%	6.3%
Health and community services	28.3%	9.1%	19.2%	22.9%	9.1%	13.8%

Source: ABS, AusStats, 5204.025.

## Distribution of productivity gains

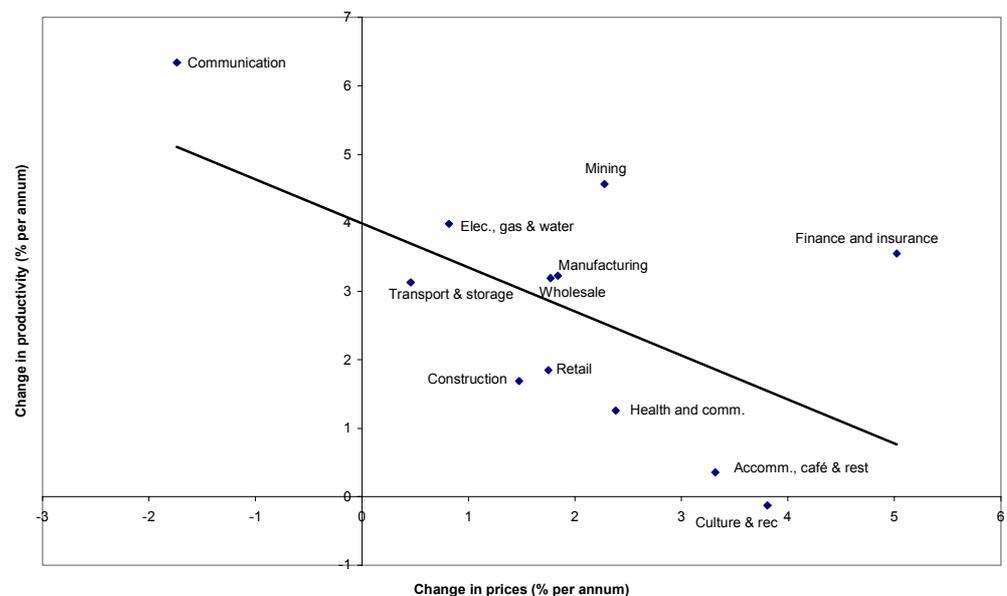
*All workers benefit from productivity growth*

- 4.58 The benefits of productivity growth can be distributed in three ways – higher wages to workers, higher profits to employers and lower prices to consumers. As a consequence of wage growth associated with strong productivity growth during the 1990s, wage and salary income as a share of factor income has remained stable at around 53 to 55 per cent since 1990.
- 4.59 The gains from productivity growth have been shared proportionately between workers and shareholders, including superannuation beneficiaries. This has been beneficial in creating conditions for continued growth in employment opportunities.
- 4.60 Another group of beneficiaries of the productivity growth has been consumers. A detailed study of the distribution of productivity gains from the 1990s by Parham et al<sup>26</sup> from the Productivity Commission supports these findings.

<sup>26</sup> D Parham, et al, *Distribution of the Economic Gains of the 1990s*, Productivity Commission Staff Research Paper, November 2000.

- 4.61 The study found that industries with high productivity growth have tended to grant wage increases in line with aggregate wage increases, have increased profits to some degree but mostly pass on the gains of productivity to consumers through lower prices.
- 4.62 The authors also noted that the negative correlation between productivity growth and prices was much stronger in the 1990s than in previous periods. It is argued that this was due to producers facing stronger competitive pressures since 1990. This encouraged productivity gains to be passed on through lower prices rather than nominal wage growth or profit taking. Thus, award workers have benefited as consumers from the increase in productivity growth.
- 4.63 The close, negative relationship between productivity growth and prices in the period since the introduction of enterprise bargaining is displayed graphically in Chart 4.3.

**Chart 4.3: Change in productivity and prices by industry, 1990-2003**



Source: ABS, AusStats 5204.025, 5204.010, 5204.012.

Note: Average annual industry price changes are estimated as the average annual change in industry gross value added in current prices minus the average annual change in the same measure but in chain volume terms.

## Conclusion

- 4.64 The strong growth in productivity experienced in Australia since 1990 is the result of the significant economic reforms of the past two decades. One important element of these reforms has been the shift towards enterprise bargaining through changes to the workplace relations system.
- 4.65 Evidence at both the aggregate industry-level and the workplace-level reinforces the central role that workplace bargaining has played in the stronger productivity growth. The continuation of the strong productivity growth over the coming decades is essential for Australia's economic and social well-being.
- 4.66 The growth in agreement making at the workplace level has underpinned the growing prosperity of not only those workers involved in agreement-making but all Australians as productivity improvements have largely been passed on to consumers in the form of lower prices.

## SECTION 5: IMPACT ON EMPLOYMENT

### Introduction

- 5.1 The Commonwealth position of not opposing an award increase of up to \$10 a week for the low paid represents an appropriately balanced position. This position is based on a desire to improve the prospects for low paid workers to gain higher wage increases and protect their employment and job prospects.
- 5.2 The ACTU claim follows a series of large increases in the FMW and award wages. International and Australian researchers and economic analysts urge caution about the rate at which minimum wages should be allowed to rise because of the negative impact on employment.
- 5.3 The Commonwealth highlights the sectoral impact of the claim. Important factors such as that the growth in employment of award-reliant workers is not increasing as fast as employment for workers on agreements in the same sectors must be taken into account by the Commission.

### Cost of the claim

*The impact of the ACTU claim will be greatest in award-reliant sectors*

- 5.4 This year the Commonwealth has not estimated the aggregate impact of the ACTU claim. The greatest impact is on award-reliant sectors and therefore the Commonwealth is concentrating its analysis in that area.
- 5.5 The Commonwealth remains critical, however, of the methodology used by the ACTU to cost the claim. Two key criticisms are that the ACTU persists in costing the claim on a net rather than gross basis and continues to ignore costing the flow-on impact of the claim.

- 5.6 The Commonwealth has extensively critiqued the costing methodology used by the ACTU in previous submissions including in the submission to the 2003 SNR<sup>1</sup>.

## Research

*The weight of the research evidence is that there is a negative relationship between minimum wage increases and employment*

- 5.7 The Commonwealth submitted in the 2003 SNR that the weight of academic evidence supports the position that there is a significant negative relationship between minimum wage increases and employment<sup>2</sup>.
- 5.8 Around 70 per cent of academic studies show that minimum wage increases cost jobs. The remaining 30 per cent of studies were for countries with a lower minimum wage 'bite'<sup>3</sup> than Australia, where minimum wages would be expected to have much less impact. Thus these studies are of little relevance to Australia.
- 5.9 This year the ACTU has submitted three new studies and a book, as well as resubmitting conclusions from the Dowrick and Quiggin study submitted last year<sup>4</sup>. The ACTU's contention that these studies demonstrate that minimum wage increases have no adverse impact on employment is not supported.
- 5.10 With regard to Dowrick and Quiggin, an extensive critique was contained in the Commonwealth submission to the 2003 SNR<sup>5</sup>. Dowrick and Quiggin rely heavily on Card and Krueger's finding that increases in youth wages in the United States had had no adverse impact on youth employment in some instances.

---

<sup>1</sup> Commonwealth Submission, 2002-2003 Safety Net Review – Wages, Section 6.

<sup>2</sup> Commonwealth Submission, 2001-2002 Safety Net Review – Wages (printed version), Section 5.

<sup>3</sup> The 'bite' of a minimum wage is its ratio to the median full-time wage.

<sup>4</sup> ACTU Written Submission, Minimum Wages Case, 5 February 2003, paragraphs 6.18.

<sup>5</sup> Commonwealth Submission, 2002-2003 Safety Net Review – Wages, Section 5 and Commonwealth Reply Submission, 2002-2003 Safety Net Review – Wages, Section 5.

- 5.11 Card and Krueger themselves acknowledged that their work would not apply to countries such as Australia where the ‘bite’ of minimum wages is much higher than it is in the United States<sup>6</sup>. In addition, Dowrick and Quiggin paid scant attention to the extensive critique of Card and Krueger.
- 5.12 A recent study by Bazen and Marimoutou has substantially added to this extensive critique<sup>7</sup>. The authors note the inability of most time series models to successfully model teenage employment in the United States over long time frames<sup>8</sup>.
- 5.13 The authors have overcome these difficulties, successfully developing a time series model that tracks the time path of the teenage employment to population ratio both within and out of sample, with consistent results over a long period of time<sup>9</sup>.
- 5.14 This model indicates a consistent negative relationship between teenage employment and the minimum wage over the period 1954 to 1999, which encompasses the period of Card and Krueger’s work.
- 5.15 According the model, a 10 per cent increase in minimum wages leads to a 1 per cent fall in teenage employment in the short run, rising to 2-3 per cent fall in employment in the longer run<sup>10</sup>.

---

<sup>6</sup> D Card and A Krueger, *Myth and Measurement – The New Economics of the Minimum Wage*, Princeton University Press, Princeton, 1995, pages 240-241.

<sup>7</sup> S Bazen and V Marimoutou, ‘Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States’, *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, pages 699-725.

<sup>8</sup> S Bazen and V Marimoutou, ‘Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States’, *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, page 699.

<sup>9</sup> S Bazen and V Marimoutou, ‘Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States’, *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, pages 699, 717-721.

<sup>10</sup> S Bazen and V Marimoutou, ‘Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States’, *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, pages 721, 723.

- 5.16 Bazen and Marimoutou conclude that other studies, such as Card and Krueger, may have failed to pick up any discernible impact of minimum wages on unemployment because they focused on the short-run rather than the long-run<sup>11</sup>. They also note that while the estimated elasticities are small, they could be larger if the minimum wage were to be 'raised to the kind of levels found in France and the Netherlands'<sup>12</sup>. Australia, of course, has a higher minimum wage than the Netherlands.
- 5.17 This thorough study provides further strong evidence against the findings of Card and Krueger and their applicability to Australian circumstances.
- 5.18 The ACTU quotes extensively from Alan Manning's book titled *Monopsony in Motion – Imperfect Competition in Labour Markets* (Princeton University Press, 2003).
- 5.19 Manning extends the economic theory of monopsony, ie where a firm has market power in setting wages, to the whole economy. In doing so, he provides a theoretical framework under which employment might increase in response to an increase in minimum wages.
- 5.20 Manning does not claim, however, that this framework reflects the labour markets in the United Kingdom or the United States, where the book's empirical work was undertaken. Rather, he stresses the need to 'rely on good quality empirical research on policy before reaching any conclusions'<sup>13</sup>. Neither the ACTU nor Manning provides any empirical evidence that Manning's theoretical framework has any relevance to Australia.

---

<sup>11</sup> S Bazen and V Marimoutou, 'Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States', *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, page 723.

<sup>12</sup> S Bazen and V Marimoutou, 'Looking for a Needle in a Haystack ? A Re-examination of the Time Series Relationship between Teenage Employment and Minimum Wages in the United States', *Oxford Bulletin of Economics and Statistics*, Vol 64, Supplement, 2002, pages 699-724.

<sup>13</sup> A Manning, *Monopsony in Motion – Imperfect Competition in Labour Markets*, Princeton University Press, Princeton and Oxford, 2003, page 365.

- 5.21 Manning cautions that, even under his framework, ‘the potential down-side from excessively high minimum wages exceeds the potential up-side for a well chosen one’<sup>14</sup>. Thus Manning’s modelling supports this submission in finding that the potential costs of excessive minimum wage increases are high.
- 5.22 A New Zealand study<sup>15</sup> cited by the ACTU looked at the impact of an increase in the teenage minimum wage on employment<sup>16</sup>.
- 5.23 The study finds no adverse impact from the large increase in youth minimum wages in New Zealand on youth employment. There was a high degree of non-compliance, however, with many employers not paying the new higher minimum wage<sup>17</sup>. Increased compliance may come at the expense of employment. Referring to their findings, the authors note that ‘given the recent increases, whether such benign effects continue going forward remains a moot point’. It is therefore premature to conclude that increasing the minimum wage in New Zealand would have no adverse effect on employment in that country.
- 5.24 The ACTU also cites a paper by Andrew Leigh on the employment impact of minimum wages in Western Australia<sup>18</sup>. This study found that increases in the Western Australian minimum wage led to lower employment in that State, using the rest of Australia as a control group.

---

<sup>14</sup> A Manning, *Monopsony in Motion – Imperfect Competition in Labour Markets*, Princeton University Press, Princeton and Oxford, 2003, page 347.

<sup>15</sup> D Hyslop and S Stillman, ‘Youth minimum Wage and the Labour Market’, May 2003, unpublished.

<sup>16</sup> This is not a ‘joint New Zealand Treasury and Department of Labour study’, as claimed by the ACTU. It is noted at the end of the footnote on the covering page that: ‘Any views expressed are the sole responsibility of the authors and do not purport to represent those of the New Zealand Department of Labour, the New Zealand Treasury, or Statistics New Zealand’.

<sup>17</sup> D Hyslop and S Stillman, ‘Youth minimum Wage and the Labour Market’, May 2003, unpublished, page 23

<sup>18</sup> A Leigh, ‘Employment Effects of Minimum Wages: Evidence from a Quasi-Experiment’, *Australian Economic Review*, Vol 36, No 4.

- 5.25 The ACTU is highly critical of Leigh's work stating that no weight should be placed on his findings. These criticisms are yet to be debated in the literature. However, there are few academic studies that have examined the effect of increasing minimum wages on employment in Australia and this study is therefore worthy of full consideration by the Commission.

## Inequality and the minimum wage

*A significant body of research exists which seriously questions the welfare improving effects of the minimum wage*

- 5.26 The ACTU submission argues that raising the minimum wage of the low paid will close the gap between the earnings of the poor and the rich by enhancing the welfare of low income households. This argument has the support of some studies, such as United States studies conducted by Card and Krueger<sup>19</sup> and Teulings<sup>20</sup>, however, numerous other studies, a number of which are discussed below, produce results which seriously question the welfare improving potential of increasing the minimum wage.
- 5.27 O'Brien-Strain and MaCurdy, who examined the impact of the 1996 increase in the minimum wage in California, found that high-income families and low-income families were nearly equally likely to benefit from the minimum wage<sup>21</sup>. It was also shown that the added employer costs resulting from a minimum wage increase were passed on through price increases on a broad range of goods and services. O'Brien-Strain and MaCurdy further found that:

*“the minimum wage imposes a higher effective price increase on the set of goods low-income families buy than it imposes on the set of goods higher-income families buy.”<sup>22</sup>*

<sup>19</sup> D Card and A Krueger, *Myth and Measurement – The New Economics of the Minimum Wage*, Princeton University Press, Princeton, 1995.

<sup>20</sup> C Teulings, 'The contribution of minimum wages to increasing wage inequality,' *The Economic Journal*, October 2003, Vol 113, Issue 490, pages 801-833.

<sup>21</sup> M O'Brien-Strain and T MaCurdy, 'Increasing the minimum wage: California's winners and losers', Public Policy Institute of California, 2000.

<sup>22</sup> M O'Brien-Strain and T MaCurdy, 'Increasing the minimum wage: California's winners and losers', Public Policy Institute of California, 2000, page 40.

- 5.28 Consequently the study concluded that the net effect of raising the minimum wage was negative averaging across all families.
- 5.29 Neumark et al conducted a number of studies in the late 1990's looking at the welfare impact of the minimum wage. In their earliest study, Neumark et al. concluded that:
- “The combined evidence indicates that in the wake of the minimum wage increases, some families gain and others lose. On net, the various tradeoffs created by minimum wage increases more closely resemble income redistribution among low-income families than income redistribution from high to low-income families. Given these findings, it is difficult to make a distributional or equity argument for minimum wages.”<sup>23</sup>*
- 5.30 Further in their 1998 study<sup>24</sup> Neumark et al report that overall, the minimum wage increases the proportion of families that are poor and near-poor families and decreases the proportion of families with incomes just above the poverty line. For this reason, they concluded that the minimum wage lowers both efficiency and equity.
- 5.31 In their latest study<sup>25</sup> on this issue, Neumark et al examined the minimum wage effects on wages, hours and employment. The results show that as a result of a minimum wage increase, wages increase for those at or near the minimum wage. In terms of hours, they found that there was only a very small immediate effect but after one year this became relatively large and negative. The effect on employment was only found to be slightly negative.

---

<sup>23</sup> D Neumark and W Wascher, ‘Do minimum wages fight poverty?’, NBER Working Paper No. 6127, 1997.

<sup>24</sup> D Neumark, M Schweitzer and W Wascher, ‘The effect of minimum wages on the distribution of family incomes: A non-parametric analysis’, NBER Working Paper No. 6536, 1998.

<sup>25</sup> D Neumark, M Schweitzer and W Wascher, ‘The effects of minimum wages throughout the wage distribution’, NBER Working Paper No. 7519, 2000.

5.32 Overall, the Neumark analysis demonstrates that:

*“...the total effects indicate that those below the minimum, at the minimum, and up to 1.1 times the minimum, experience income declines...Although disemployment effects are tempered, hours reduction after one year are much sharper and the wage gains considerably weaker. Overall this analysis indicates that the average low-wage worker is not helped, and is perhaps hurt, by a minimum wage increase. Although minimum wage bump up the wages of these workers, hours reductions, in particular, interact with changes in wages in such a way that earned income declines.”<sup>26</sup>*

5.33 Golan et al, using four different measures of welfare, found that for each measure an increase in the minimum wage reduced welfare:

*“...we find that a 10 per cent increase in the minimum wage would lower the average annual income per adult by \$226 (US) and would increase the variance, skewness, and kurtosis of the income distribution. These shifts in the distribution make it less egalitarian by all our welfare measures. These results confirm that the minimum wage lowers average income and increases inequality according to all standard measures.”<sup>27</sup>*

5.34 A significant body of research suggests that minimum wage increases do not in fact have welfare improving potential as asserted by the ACTU. In some case can actually decrease the real incomes of those at or near the minimum wage.

---

<sup>26</sup> D Neumark, M Schweitzer and W Wascher, ‘The effects of minimum wages throughout the wage distribution’, NBER Working Paper No. 7519, 2000, page 24.

<sup>27</sup> A Golan, J Perloff and X Wu, ‘Welfare effects of minimum wage and other government policies’, CUDARE Working Paper, February 2001, page 28.

## Sectoral Impact

- 5.35 In the 2003 SNR decision the Commission recognised that SNAs will impact differently on different sectors of the economy and on different enterprises<sup>28</sup>. The issue of isolating the economic impact of increases in award wages, however, is quite complex.
- 5.36 Wage levels are just one of many variables that affect the rate of employment growth. Employment levels are directly related to industry output, which in turn is related to a range of other factors, including productivity growth, changes in consumer preferences and income levels, trade exposure, and the speed with which industries can adjust to change.
- 5.37 As a result, an industry may experience strong demand driven growth with consequent employment growth despite wage pressures. Employment growth, however, would still be lower than it otherwise would have been in the absence of these wage pressures.
- 5.38 Consequently it is too simplistic to argue, as the ACTU<sup>29</sup> and the State and Territory Governments<sup>30</sup> do, that because employment growth in the award-reliant industries has outstripped total employment growth, previous SNAs have had no impact on employment.
- 5.39 The differential impact of increases in award wages can be isolated by comparing the change in employment of award-reliant and agreement-based workers within an industry sector. This approach helps to account for all the other factors which may affect the employment growth of industries which has confounded such analysis in the past.

---

<sup>28</sup> Safety Net Review – Wages, May 2003, Print 002003, paragraph 189.

<sup>29</sup> ACTU Written Submission, Minimum Wage Case, 28 January 2004, paragraphs 2.12 and 6.10, pages 15, 86.

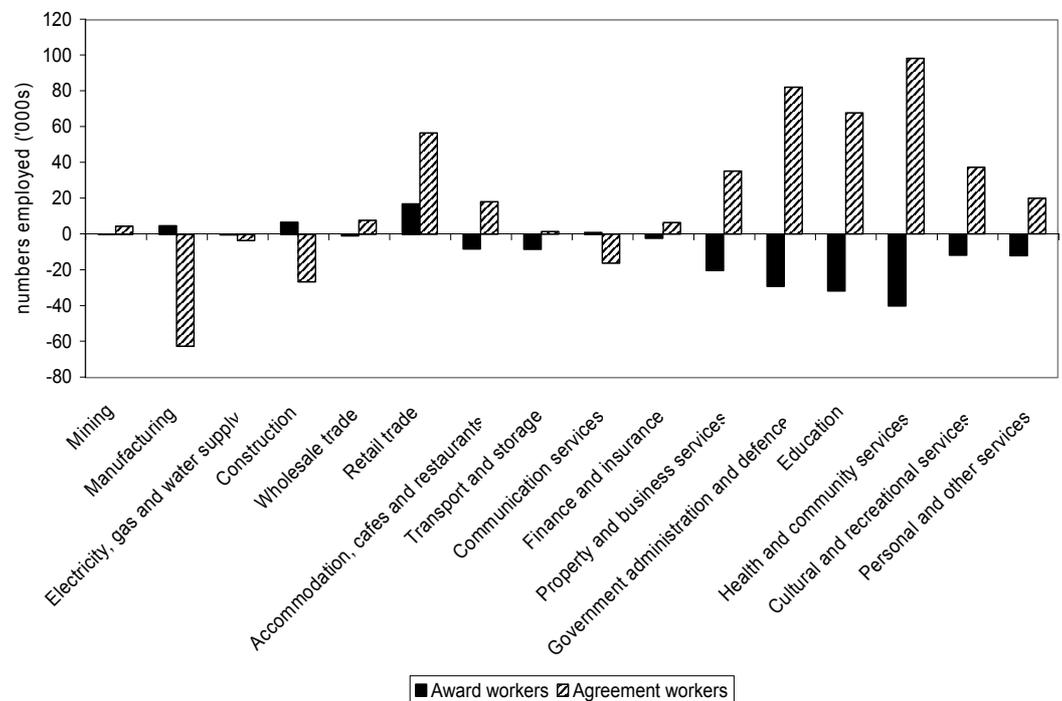
<sup>30</sup> State and Territory Governments Written Submission, Minimum Wage Case, 4 February 2004, pages 34-35.

5.40 In this respect, the Commonwealth reply submission to the 2003 SNR provided clear evidence that declining award coverage is associated with employment growth<sup>31</sup>. This is further supported by the data in Chart 5.1 below, which presents the changes in employment levels for workers on awards and agreements between August 2000 and August 2002<sup>32</sup>. Non-award employment increased in all but three industries, with a net increase of 327,000 jobs. Award employment fell in all but five industries, with a net decline of 133,000 jobs.

*Employment of award-reliant workers is not increasing as fast as for workers on agreements in the same industries*

5.41 Thus the increase in the number of workers on agreements far exceeded the contraction in the number of workers on awards. It therefore seems reasonable to conclude that most new employees are engaged under agreements, not awards.

**Chart 5.1: Change in numbers employed under agreements and awards by industry, May 2000 to May 2002**



Source: ABS, *Employment, Earnings and Hours, May 2000 and 2002, Cat No. 6306.0* and *ABS, Supertables, E06*.

<sup>31</sup> Commonwealth Reply Submission, 2002-2003 Safety Net Review – Wages, Section 7.

<sup>32</sup> ABS, *Employee Earnings and Hours, Cat. No. 6306.0, August 2000 and August 2002*.

*Award reliance reduces the employment potential of industries*

- 5.42 In the 2003 SNR decision, the Commission accepted that any economic impact of awards will be most noticeable in the three most award-reliant industries, namely Accommodation, cafes and restaurants, Retail trade and Health and community services.<sup>33</sup>
- 5.43 Over the period May 2000 to May 2002 the aggregate number of employees on agreements for these three industries increased by 173,000, while the aggregate number of employees on awards fell by 31,000. Thus employment growth in the award-reliant industries over this period was entirely accounted for by workers under agreements. There is no evidence that award reliance is consistent with an above average rate of employment growth.
- 5.44 The ACTU submits, at Table 6.3, data from three ABS publications in an attempt to show that the award-reliant sectors have performed well over the period 1996-2003.<sup>34</sup>
- 5.45 The Commission's attention is drawn to the fact that year-average hours worked, which takes into account changes in the part-time/full-time mix of workers, in Accommodation, cafes and restaurants, the most award-reliant industry, experienced a significant decline of 5.4 per cent in 2001-02, followed by a decline of 1.1 per cent in 2002-03. Year average employment also declined over both these periods, by 1.1 per cent and 1.9 per cent respectively<sup>35</sup>.
- 5.46 The data used by the ACTU overstates the recent employment performance of these industries.

<sup>33</sup> Safety Net Review – Wages, May 2003, Print 002003, paragraphs 150, 175.

<sup>34</sup> ACTU Written Submission, Minimum Wages Case, 28 January 2004, page 86.

<sup>35</sup> ABS, Supertables, E06.

## Conclusion

- 5.47 The ACTU claim follows a series of large increases in the FMW and award wages generally. This has occurred on top of a FMW which is high by international minimum wage comparisons. The Commonwealth submitted in the 2003 SNR that the weight of academic evidence supports the position that there is a significant negative relationship between minimum wage increases and employment. None of the evidence presented by the ACTU for the 2004 SNR calls into doubt that position.
- 5.48 The more award-reliant industries such as Accommodation, cafes and restaurants, retail and Health and community services have experienced sound employment growth as stated by the ACTU. It is noteworthy, however, that this employment growth has not occurred in the award-reliant sectors of those industries.
- 5.49 Indeed the employment of award-reliant workers has fallen in aggregate in these three industries. This must introduce a note of caution in the pace at which award wages can be increased in those industries, and indeed all industries, without limiting employment opportunities for award workers.
- 5.50 The ACTU provides no substantial evidence in support of its claim that an increase of \$26.60 per week in award wages has no adverse impact on employment.

## **SECTION 6: LIVING STANDARDS**

### **Introduction**

- 6.1 SNAs are a particularly poor means of addressing low pay at the household level. Many low income families receive little or no wage income while numerous households with minimum wage workers earn in the middle or high income bands.
- 6.2 Unemployment or joblessness is a key cause of social inequality. Further reductions in unemployment will greatly improve living standards in the community.
- 6.3 It is crucial that SNAs are set at a moderate, responsible and capped level to ensure that they do not cause major employment loss.

### **Budget Standards**

- 6.4 The ACTU submission relies heavily on ‘budget standards’ produced by Professor Peter Saunders from the Social Policy Research Centre (SPRC) at the University of New South Wales as evidence regarding the needs of the low paid<sup>1</sup>.
- 6.5 The original work undertaken by the SPRC for the former Department of Social Security, now the Department of Family and Community Services (FaCS), on budget standards was only one of a number of adequacy benchmark projects undertaken or commissioned by FaCS. The work was designed to inform debate, not to identify a specific benchmark that would be adopted.

---

<sup>1</sup> ACTU Written Submission, Minimum Wages Case, 28 January, Chapter 7.

- 6.6 The ACTU presented evidence from the SPRC's budget standards research to support its submission to the Safety Net Review in 1998-99. At the time, the Joint Governments' Submission demonstrated fundamental concerns with the Budget Standards methodology.<sup>2</sup>
- 6.7 The SPRC updated research is primarily only a price-based update. The SPRC claim to have also adjusted the standards for concerns about methodology. However, these changes do not address the fundamental problems, such as differences in housing costs in different localities, with the original research.
- 6.8 At a conceptual level, such standards can at best provide just one indicator of the needs of low income households. A range of measures of financial need, including budget standards, have been considered over many years. None of these measures can be used as a definitive measure of the financial needs of the low paid.

*There are fundamental concerns with the budget standards methodology*

## Household income

*SNAs are a poor means of addressing the needs of low paid households*

- 6.9 The focus of Saunders' research is household income. SNAs are a particularly poor means of addressing low pay at the household level. The Commonwealth submitted in last year's SNR submission that many low income families receive little or no wage income while numerous households with minimum wage workers lie in the middle or high income bands<sup>3</sup>.
- 6.10 Attempts to address the needs of the low paid through the wages system, as Saunders advocates, may in fact end up causing significant harm to this group.

<sup>2</sup> Commonwealth of Australia 1998, Safety Net Review – Wages October 1998 – March 1999: Joint Governments' Submission, chapter 10.6

<sup>3</sup> Commonwealth Submission, Safety Net Review – Wages, 26 February 2003, paragraph 9.46.

- 6.11 As presented in Section 5 of this submission, a number of studies show that raising minimum wages can provide a reduction in the welfare of the low paid particularly through reduced hours of work or unemployment.
- 6.12 A wage increase will not benefit a household where no one works. In other words, by raising the wages of the low paid towards Saunders' MBA budget standard the unintended consequence may be that many low paid workers become unemployed.
- 6.13 Leaving the technicalities of the budget standards approach to one side, the question arises as to the best mechanism for low income households to attain a higher standard of living. Saunders argues that while it is important that the tax and transfer systems are set appropriately and functioning effectively, the needs of the low paid should be addressed principally through the wage determination system<sup>4</sup>.
- 6.14 Again it is submitted that SNAs are a blunt instrument for improving the financial position of low income families. The tax-transfer system targets assistance to those most in need and is a much better tool for addressing the needs of the low paid.
- 6.15 Evidence presented by the Commonwealth in last year's SNR demonstrated that the regular indexation of social security payments can be of greater benefit to low income families than SNAs<sup>5</sup>.
- 6.16 The Commission acknowledged in previous SNRs that the award system is not the most effective mechanism for addressing the needs of the low paid and that the tax-transfer system allows for better targeting.
- 6.17 For example, in the 2002 SNR decision, the Commission noted:

*The needs of the low paid are best addressed through the tax-transfer system*

---

<sup>4</sup>ACTU Composite Exhibit, Minimum Wages Case, 28 January 2004, Tag 8, page 117.

<sup>5</sup> Commonwealth Submission, Safety Net Review – Wages, 26 February 2003, paragraphs 9.44 and 9.45.

*“[In regard to] the Commonwealth’s submission that the wages system has a limited capacity to address and meet social equity goals. We agree with the proposition that the tax-transfer system can provide more targeted assistance. This is not to suggest that safety net increases do not assist in meeting the needs of the low paid.”<sup>6</sup>*

- 6.18 The Commission affirmed these views in its 2003 SNR decision. However, the Commission “note[d] that on this occasion there are again no specific proposals to make significant adjustments to the social safety net.”<sup>7</sup> The Commission went on to say that:

*“If the Commission was presented with alternative proposals that more effectively addressed the needs of the low paid this may enable the object of maintaining a safety net of fair minimum wages to be achieved in a way that better balances meeting the needs of the low paid with the economic considerations and is more beneficial to the national economy.”<sup>8</sup>*

## **Tax Cuts**

- 6.19 Since the 2003 SNR decision, the Government presented its 2003-04 Budget in which it reduced personal income taxation from 1 July 2003, with particular benefit for low income earners. The tax cuts provided were in addition to the significant reduction in income tax introduced as part of *The New Tax System* on 1 July 2000.

---

<sup>6</sup> Safety Net Review – Wages, May 2002, paragraphs 147-148.

<sup>7</sup> Safety Net Review – Wages, May 2003, paragraph 229.

<sup>8</sup> Safety Net Review – Wages, May 2003, paragraph 230.

*Recent tax cuts mean the low paid now have a higher income*

- 6.20 The 2003-04 Budget measure involved raising the personal income tax thresholds attached to the 30 per cent, 42 per cent and 47 per cent marginal income tax rates. For example, the 30 per cent threshold was increased from \$20,000 to \$21,600. In addition, the low income tax offset was increased from \$150 to \$235 per year<sup>9</sup>.
- 6.21 These measures provided a significant benefit to low income earners. Combined, these measures amounted to an estimated reduction in the tax liability of people on the FMW of around \$6.33 per week (\$329 per year) from 1 July 2003. This equated to a 9 per cent reduction in their tax liability, a higher percentage reduction than that received by higher income earners.

## **Conclusion**

- 6.22 SNAs are a poor means of addressing the needs of low paid households. The living standards of the low paid are best addressed through the tax-transfer system. This is evidenced by the recent tax cuts which were of significant benefit to low paid workers.
- 6.23 The Commonwealth reiterates that when the severe costs of unemployment are considered it is crucial that SNAs are set at a level that does not cause major employment loss.

---

<sup>9</sup> Further details are contained in Commonwealth of Australia, 2003-04 Budget Paper No.2, “Budget Measures 2003-04” and The Hon. Peter Costello MP, “Personal Income Tax Cuts”, Press release No. 029, 13 May 2003.



## APPENDIX A: REGRESSION RESULTS

### The relationship between changes in award coverage of full-time and part-time workers by industry and the difference between changes in full-time wages under agreements awards and awards

- A.1 Table A.1 below presents the results of a regression of the change in award coverage, between 2000 and 2002, and changes in the level of wages applying under agreements compared to changes in the levels of award wages, between 2000 and 2002. Also included is the variable of the level of award coverage pertaining in 2000. This variable was included as it is assumed that as award coverage declines over time it becomes more difficult to achieve further reductions.
- A.2 The regression is estimated using weighted least squares using industry employment levels as at 2002 as the weighting variable. This appropriately gives greater weight to industries with larger employment levels. Sixteen industries are included in the analysis.
- A.3 The results of the regression show that there is a significant relationship between the variables. Higher levels of award coverage in 2000 were associated with greater falls in coverage over the period 2000 and 2002. Also the difference in the levels of wages on agreements and awards had an effect on the change in award coverage. A 10 per cent increase in wages under agreements compared to award wages is associated with a 2 per cent change in the level of award coverage.
- A.4 The diagnostic statistics show that this is a robust model. According to the  $R^2$  value, the change in award coverage variable explains approximately 60 per cent of the average annual growth in productivity.

**Table A.1: Econometric testing using weighted ordinary least squares of the relationship between changes in award coverage of full-time and part-time workers by industry and the difference between changes in full-time wages under agreements awards and awards**

<b>Dependent variable:</b> Change in award coverage of full-time and part-time workers			
<b>Weighting series:</b> Employment by industry 2002			
<b>Observations:</b> 16			
<b>Independent variables</b>	<b>Coefficient</b>	<b>Std. error</b>	<b>t-statistic</b>
Constant	-0.4	-1.1	-0.4
Change in agreement wage less change in award wage 2000 to 2002	-0.2	0.05	-4.7
Proportion of workforce paid under awards in 2000	-0.1	0.04	-3.2
<b>Diagnostic Statistics</b>			
Adjusted R <sup>2</sup> :0.6	F - statistic:13.7		

Source: ABS, *Employment Earnings and Hours, May 2000 and May 2002 (unpublished data)*

**The relationship between changes in award coverage of full-time workers by 15 industries and 9 occupations and the difference between changes in full-time wages under agreements awards and awards**

A.5 Table A.2 below presents the results of the analysis of changes in award coverage and the relative levels of agreement and award wages at a disaggregated level. The data for each of the 16 industries is disaggregated into 9 occupations to remove the effects of occupational compositional change between 2000 and 2002. Accordingly the analysis starts with 144 observations ie 9 occupations in each of the 16 industries. Unfortunately due

to ABS data limitations the number of usable observations was reduced to 89 observations.

- A.6 The regression is estimated using weighted least squares using industry employment levels as at 2002 as the weighting variable. This appropriately gives greater weight to industries with larger employment levels.
- A.7 The change in award coverage, between 2000 and 2002, was regressed against changes in the level of wages applying under agreements less changes in award wages, between 2000 and 2002. Also included is the variable of the level of award coverage pertaining in 2000. This variable was included as it is assumed that as award coverage declines over time it becomes more difficult to achieve further reductions.
- A.8 The results of the regression show that there is a significant relationship between the variables. Higher levels of award coverage in 2000 were associated with greater falls in coverage over the period 2000 and 2002. Also the difference in the levels of wages on agreements and awards had an effect on the change in award coverage. A 10 per cent increase in wages under agreements compared to award wages is associated with a 3 per cent change in the level of award coverage.
- A.9 The diagnostic statistics show that this is a robust model. According to the  $R^2$  value, the change in award coverage variable explains approximately 40 per cent of the average annual growth in productivity. The analysis shows that if agreement wages grow 10 percentage faster than award wages then the level of award coverage falls by almost 3 percentage points.

**Table A.2: Econometric testing using weighted ordinary least squares of the relationship between changes in award coverage of full-time workers by 15 industries and 9 occupations and the difference between changes in full-time wages under agreements awards and awards**

<b>Dependent Variable:</b> Changes in award coverage of full-time workers			
<b>Weighting series:</b> Employment by industry 2002.			
<b>Observations:</b> 89			
<b>Independent variables</b>	<b>Coefficient</b>	<b>Std. error</b>	<b>t-statistic</b>
Constant	2.5	1.3	1.9
Change in agreement wage less change in award wage 2000 to 2002	-0.3	0.1	-3.5
Proportion of workforce paid under awards in 2000	-0.3	0.05	-6.4
<b>Diagnostic Statistics</b>			
Adjusted R <sup>2</sup> :0.4	F - statistic:22.2		

Source: ABS, *Employment Earnings and Hours, May 2000 and May 2002 (unpublished data)*

### **The relationship between award change 1990-2002 and labour productivity 1990-2003 for 7 industries**

- A.10 Table A.3 below presents the results of a regression of the annual average change in productivity (per cent) between 1990 and 2003 and the change in award coverage between 1990 and 2002 (percentage points) at the industry level. Only 7 industries are included due to ABS data limitations. The results of the regression show that there is a significant relationship between these two variables.
- A.11 The diagnostic statistics show that this is a robust model. According to the R<sup>2</sup> value, the change in award coverage variable explains approximately 58 per cent of the average annual growth in productivity.

**Table A.3: Econometric testing using ordinary least squares of the relationship between award change 1990-2002 and labour productivity 1990-2003 for 7 industries.**

<b>Dependent variable:</b> % average annual change in productivity 1990-2003			
<b>Observations:</b> 7			
<b>Independent variables</b>	<b>Coefficient</b>	<b>Std. error</b>	<b>t-statistic [a]</b>
Constant	0.75	1.01	0.75
% point change in award coverage 1990 to 2002	-0.05	0.02	-3.03
<b>Diagnostic statistics</b>			
Adjusted R <sup>2</sup> : 0.58	F stat: 9.18		

*Source: ABS AusStats 5204.025; ABS Employee Earnings and Hours, May 2002 (ABS Cat. No. 6306.0); ABS Award Coverage, May 1990 (ABS Cat. No. 6315.0) unpublished data.*

(a) A t-statistic with an absolute value greater than 1.94 indicates a significant relationship between this variable and the dependent variable.

## Other influences on labour productivity for 7 industries

A.12 Table A.4 below presents the results of a regression which examines the relationship between average annual productivity growth (per cent) between 1990 and 2003 and various factors which can explain productivity growth.

A.13 The first factor is an industry's average productivity level in the previous period (1986 to 1990) which is used to determine which industries are intrinsically 'high productivity' and 'low productivity'. The second factor is the average annual change in the capital-labour ratio (1990 to 2002) which can also affect productivity due to 'capital deepening'. The final factor is the change in award coverage between 1990 and 2002, in percentage points. Again, due to the inclusion of this variable, only 7 industries can be included due to ABS data limitations.

A.14 The regression is estimated using weighted least squares using average hours worked between 1990 and 2003 as the weighting variable. This appropriately gives greater weight to the industries with larger employment levels.

A.15 The t-statistics show that the percentage point change in award coverage and the capital-labour ratio variables are significant in explaining the average annual change in productivity. The diagnostic statistics show that this is a robust model in explaining productivity growth.

**Table A.4: Econometric testing using weighted ordinary least squares of influences on labour productivity for 7 industries.**

<b>Dependent variable:</b> % average annual change in productivity 1990-2003			
<b>Weighting series:</b> average hours worked 1990-2003			
<b>Observations:</b> 7			
<b>Independent variables</b>	<b>Coefficient</b>	<b>Std. error</b>	<b>t-statistic</b>
Constant	-1.37	0.42	-3.27
Average productivity level 1986-1990	0.0005	0.001	0.45
% point change in award coverage 1990 to 2002	-0.05	0.01	-4.60
% average annual change in capital labour ratio 1990-2002 [a]	0.51	0.06	7.89
<b>Diagnostic statistics</b>			
Adjusted R <sup>2</sup> : 0.99	F stat: 31.29		

Source: ABS AusStats 5204.025; ABS National Accounts (ABS Cat. No. 5206.0); ABS Employee Earnings and Hours, May 2002 (ABS Cat. No. 6306.0); ABS Award Coverage, May 1990 (ABS Cat. No. 6315.0) unpublished data; ABS Labour Force Survey data, Supertable E03; Productivity Commission (<http://www.pc.gov.au/work/productivity/industry2002.xls>).

(a) The Productivity Commission is yet to release its capital-labour ratio estimates for the year to June 2003.

## Other influences on labour productivity for 11 industries

A.16 Due to the exclusion of only 7 industries, the regression exercise presented in Table A.4 excludes a number of important service industries. However, if the award change between 1990 and 2002 variable is replaced with the award levels in each industry in 2002, all 11 industries with productivity and capital-labour ratio data can be analysed. The results of this new regression are presented in Table A.5.

- A.17 The regression is estimated using weighted least squares using average hours worked between 1990 and 2003 as the weighting variable. This appropriately gives greater weight to the industries with larger employment levels.
- A.18 The t-statistics show that only the percentage of each industry's workforce paid under awards is significant in explaining average annual productivity growth. The diagnostic statistics show that this is a robust model in explaining productivity growth.
- A.19 The model was estimated using White Heteroskedasticity-Consistent Standard Errors and Covariance due to the presence of heteroskedasticity.

**Table A.5: Econometric testing using weighted ordinary least squares of influences on labour productivity for 11 industries.**

<b>Dependent variable:</b> % average annual change in productivity 1990-2003			
<b>Weighting series:</b> average hours worked 1990-2003			
<b>Observations:</b> 11			
<b>Independent variables</b>	<b>Coefficient</b>	<b>Std. error</b>	<b>t-statistic</b>
Constant	3.24	0.97	3.35
Average productivity level 1986-1990	-0.001	0.001	-0.55
% of workforce award paid 2002	-0.06	0.01	-4.74
% average annual change in capital labour ratio 1990-2002	0.18	0.15	1.2
<b>Diagnostic statistics</b>			
Adjusted R <sup>2</sup> : 0.90	F stat: 5.98		

Source: ABS AusStats 5204.025; ABS National Accounts (ABS Cat. No. 5206.0); ABS Employee Earnings and Hours, May 2002 (ABS Cat. No. 6306.0); ABS Labour Force Survey data, Supertable E03; Productivity Commission (<http://www.pc.gov.au/work/productivity/industry2002.xls>).