# The Labour Market for Young Australians

Mark Wooden

National Institute of Labour Studies Flinders University of South Australia

March, 1998

## **Executive Summary**

- The most significant change in the teenage labour market during the last two decades has been the decline in the number of full-time job opportunities. This in turn has helped fuel the marked increases in school retention and levels of participation in higher education observed in the 1980s and early 1990s.
- Full-time jobs are gradually being replaced by part-time, casual jobs, the majority of which are highly concentrated in low-skill occupations.
- The new part-time, casual jobs are not necessarily 'bad' jobs. Indeed, for teenagers still involved in full-time education, these jobs would appear to be largely consistent with individual preferences. For non-students, and especially early school leavers, however, the exposure to low-skilled, casual jobs rather than more training intensive jobs, may be problematic.
- The weakness of the teenage labour market is reflected in the persistence of high rates of unemployment. While the level of joblessness among teenagers has not deteriorated relative to the level among adults, there are good reasons to suspect that spells of unemployment when young have a scarring effect, and increase the likelihood of individuals being exposed to further spells of unemployment when older.
- There are good reasons to be concerned that the changing structure of the teenage labour market has actually acted to raise the cost of teenage labour. While award wage relativities may not have changed, employers today find themselves paying more for inexperienced labour than 20 years ago. This results because the average school leaving age has effectively risen but most awards require employers to pay workers who are two years older considerably more simply because of their age and not because they are necessarily more productive.
- Policy-makers need to give attention to: (i) stimulating employer demand for youth labour, and especially early school leavers; and (ii) ensuring the structure of youth wages is not adversely affecting the employment prospects of teenagers.

## Introduction

The teenage labour market in Australia has undergone massive change over the last quarter of a century or so. As reported in Norris and Wooden (1996), three significant inter-related developments have taken place. First, full-time employment opportunities for young people have collapsed. Second, and in part a direct result of the decline in full-time employment opportunities, there has been a marked increase in participation by young people in education. Third, part-time employment opportunities have risen rapidly. In this paper, these and other related developments are examined in more detail. Specifically, this paper provides a statistical overview of the labour market for teenagers drawing primarily on labour force survey data. It begins by dividing the labour market for teenagers into a number of segments according to age, sex, study status and hours of work (for those employed), and quantifying those segments. Some comparisons with older labour market groups are also provided. Other issues that are examined in the paper include:

- (i) the changing relationship between education and employment for teenagers;
- (ii) the changing composition of teenage employment;
- (iii) the rise in teenage unemployment; and
- (iv) the impact of youth wage structures on the demand for teenage labour.

## The teenage labour market: An overview

## The composition of the teenage labour market

As at August 1997, the teenage labour market (defined as the sum of persons in employment and in unemployment) consisted of 686 thousand persons, representing 7.6 per cent of the total labour force within the working age population. Compared with a total teenage population of 1288.8 thousand persons, this gives a labour force participation rate of 53.2 per cent, well below that for the total population aged 15 years or over (62.2 per cent). Not surprisingly, the main source of this differential is attendance at educational institutions among young people. Indeed, the labour force participation rate among the teenage population once school students and full-time tertiary students are excluded is approaching 90 per cent (87.4 per cent).

Interestingly, labour force participation rates among teenagers are slightly higher among females than among males. This stands in marked contrast to older age groups where rates of participation are much higher among males. This reflects the impact of child rearing on the labour force behaviour of adult women. A more detailed breakdown of the teenage population by labour force activity is provided in Table 1. This table divides the teenage labour market into a number of distinct segments on the basis of not just sex, but also hours of work and study status — though all three of these factors are related in the way they influence labour market outcomes.

Table 1 reveals that only 29.9 per cent of the teenage labour force were in fulltime employmentin August 1997.<sup>1</sup> Part-time employment is far more common, with over half (50.8 per cent) of the teenage labour force in parttime jobs. This thus leaves just under 20 per cent in search of work — the unemployed.

	Employed			Unemployed		Not in LF		Total
	FT	PT: Student	PT: Non- student	Student	Non- student	Student	Non- student	
Males								
Number (000s)	132.6	117.3	28.7	28.5	42.3	289.6	21.6	660.5
% employment	47.6	42.1	10.3					
% labour force	38.0	33.6	8.2	8.2	12.1			
% population	20.1	17.8	4.3	4.3	6.4	43.8	3.3	100.0
Females								
Number (000s)	72.3	163.0	39.5	32.5	29.4	264.0	27.7	628.3
% employment	26.3	59.3	14.4					
% labour force	21.4	48.4	11.7	9.7	8.7			
% population	11.5	25.9	6.3	5.2	4.7	42.0	4.4	100.0
Persons								
Number (000s)	204.9	280.3	68.2	61.0	71.6	553.4	49.3	1288.8
% employment	37.0	50.7	12.3					
% labour force	29.9	40.9	9.9	8.9	10.4			
% population	15.9	21.8	5.3	4.7	5.6	42.9	3.8	100.0

#### Table 1: The composition of the teenage labour market, August 1997

Note: For the purposes of this table, a student is defined as a person attending school or attending a tertiary educational institution full-time.

Source: ABS, The Labour Force, Australia, August 1997, ABS cat. no. 6203.0.

<sup>&</sup>lt;sup>1</sup> A full-time worker is defined as anyone who usually works 35 hours or more a week in all jobs and others who, although usually working less than 35 hours a week, worked 35 hours or more during the survey reference week.

Unemployment rates are higher for teenage males (20.2 per cent) than for teenage females (18.4 per cent). While this may reflect relatively poor employment opportunities for traditional 'male' jobs as compared with 'female' jobs (especially in the traditional apprentice areas), additional explanations may lie in the lower levels of participation of teenage males in full-time education and the lower levels of part-time employment among young males.

Among those in part-time employment it is important to separately identify full-time students, given the reasons underlying the employment decision are likely to be influenced by education choices (Ashenden 1990, Wooden, Robertson and Dawkins 1994). Moreover, this distinction is numerically very important, with 80 per cent of part-time teenagers workers involved in fulltime education. Note also that a sizeable proportion of those classified as unemployed (46 per cent) were actually full-time students for whom study was presumably only seen as a preferred alternative to collecting unemployment benefits. It is strongly suspected that this situation also applies to some of the 553 500 students not seeking work, but who nevertheless might cease study should employment opportunities improve.

### Teenagers and older age groups compared

A further perspective on the nature of the teenage labour market is provided by comparisons with older labour market segments. Table 2 provides information on a number of key labour market characteristics after disaggregating the labour market into four groups — teenagers, young adults (defined here as persons between 20 and 24 years of age), prime-age adults (between 25 and 54 years of age) and mature-age adults (55 years and over). The main features of this table are as follows:

- The gender composition of the labour force is much more equal among teenagers than among older cohorts. This is not surprising and as already noted, reflects the impact of child rearing and other family demands on the labour force participation of adult females.
- As a consequence of the concentration of education during youth, labour force participation rates are much lower among teenagers than among both young adults and prime-age adults.
- The incidence of unemployment is much higher among teenagers than among older cohorts. Such findings have been well documented (eg., Brooks and Volker 1985, Miller 1989) and reflect the benefits of experience and the gradual acquisition of knowledge about the labour market over time.
- While the likelihood of unemployment is highest among teenagers, the average duration of unemployment is much shorter. In part, this is a

#### function of the shorter time teenagers will have spent in the

	Teenagers	Young adults	Prime-age adults	Mature-age adults
Females as a % of the LF	48.4	46.4	42.9	32.9
Labour force participation (%	57.1	82.3	81.0	43.1
Unemployment rate (%)	19.5	11.9	6.8	6.8
Average duration of unemployment (weeks)	27.0	37.1	55.5	96.4
Part-time employment as a % of total employment	62.3	24.5	20.8	30.2
Job mobility rate (%) <sup>b</sup>	27.6	31.6	19.8	11.2 <sup>c</sup>
Casual employees as a % of employees <sup>d</sup>	62.4	28.4	21.0	30.8

# Table 2: Selected characteristics of labour markets segmented by age group, 1996<sup>a</sup>

Notes: a With the exception of the job mobility rate, all figures reported in this table apply to August 1996.

- b Persons who changed their employer during the year ended February 1996 as a percentage of all persons who had a job during that year.
- c Relates only to persons between the ages of 55 and 69 years.
- d Casual employment relates only to the main job held, and not all jobs. Further, the population base used here is all employees (and hence excludes employers and the self-employed) rather than all employed persons.

Sources: ABS, The Labour Force, Australia, August 1996, ABS cat. no. 6203.0.

ABS, Labour Mobility, Australia, Year Ended February 1996, ABS cat. no. 6209.0.

Unpublished data from the ABS Labour Force Supplementary Survey, August 1996.

labour force relative to older workers. However, it may also reflect greater probabilities of leaving unemployment among young people.<sup>2</sup>

• The incidence of part-time employment is very high among teenagers, reflecting, at least in part, preferences among full-time students for part-time work (almost 80 per cent of part-time teenage workers were full-time students). Conversely, the high part-time employment share

<sup>&</sup>lt;sup>2</sup> Though Brooks and Volker (1986) have found that this is only true of males. Among females, older women were found to have the highest probabilities of exiting unemployment.

among teenagers reflects their low probability of securing full-time employment.

- Youth are more mobile between jobs than are older workers, though mobility rates are higher among young adults than among teenagers. This latter result may reflect life-cycle differences. Compared with teenagers, young adults are much more likely to be at the point in their life where career choices are important. For many teenagers, on the other hand, careers decisions will be on hold as they complete their education.
- The incidence of casual employment is much higher among youth than other age groups, and reflects the close correlation between part-time and casual employment.

## Education or work?

### Changing trends in teenage participation in work and education

As noted in the Introduction, one of the most significant labour market developments in the last two decades has been the collapse in the full-time jobs market for young people. This has been reflected in a marked fall in full-time labour force participation rates for teenagers.<sup>3</sup> As shown in Figure 1, full-time labour force participation rates for teenage males stood at over 50 per cent in 1978. That is, more than half the total population of teenage males in 1978 either held a full-time job or were looking for full-time work. By August 1997 this proportion had fallen to just 26.8 per cent. Among girls the slide has been even more dramatic; from 44 per cent to 16 per cent.<sup>4</sup>

Very differently, part-time labour force participation rates have risen for teenagers, though not by enough to have prevented total participation rates from falling. For males the part-time labour force participation rate has risen from just 10 per cent in 1978 to 26 per cent by 1997, while for females the rate has risen from 13 per cent to 37 per cent.<sup>5</sup>

Accompanying this shift in the level and composition of teenage labour force participation has been a marked expansion in the number of young people staying on at school and continuing on to post-school studies. Retention of

<sup>&</sup>lt;sup>3</sup> The full-time labour force participation rate is constructed as the number of persons in fulltime employment plus the number of persons looking for full-time work, as a percentage of the total civilian population in that age group.

<sup>&</sup>lt;sup>4</sup> Full-time labour force participation rates have also been declining among prime-age adult males. This decline — from 92 per cent to 85 per cent — however, is not as pronounced as among teenage males. In contrast, and unlike teenage females, full-time labour force participation rates for prime-age adult females have been rising since 1978, increasing from just 32 per cent in 1978 to 41 per cent by August 1997.

<sup>&</sup>lt;sup>5</sup> By comparison, over this same period, part-time labour force participation rates for primeage males rose from just 2.6 per cent to 6 per cent. For prime-age adult females the rate rose from 21 per cent to 33 per cent.

young people to Year 12 of secondary school, for example, increased from less than 35 per cent in 1981 to 77 per cent by 1992. While the rate has subsequently fallen (it was 71.3 per cent in 1996), it is still more than double the rates experienced prior to the 1980s.<sup>6</sup> Similarly,





Source: ABS, Labour Force, Australia, ABS cat nos 6203.0 and 6204.0, various issues.

enrolments in higher education have also grown rapidly, rising from just 7.7 per cent of the 15 to 24 year-old population in 1981 to 14.2 per cent by May 1995.<sup>7</sup>

While there are a number of factors responsible for this growth in participation in education, not least being the expansion of government funding for education, and higher education in particular, during the 1980s (see McCormack 1992, Gregory 1995), the fact that the decline in full-time labour participation rates for teenagers pre-dates the expansion in the education sector, suggests that changing labour market conditions have

<sup>&</sup>lt;sup>6</sup> These data come from ABS, *Schools, Australia*, ABS cat. no. 4221.0.

<sup>&</sup>lt;sup>7</sup> Derived from ABS, *Transition from Education to Work, Australia,* ABS cat. no. 6227.0.

directly contributed to the growth in educational participation. In other words, part of the increase in school retention and university enrolments must represent a response to the lack of full-time employment opportunities for young people. Support for this hypothesis has been found in a number of econometric studies (eg., Larum and Beggs 1989, Karmel 1995, Lewis and Koshy 1997). Further evidence is provided by the high proportion of teenagers enumerated as being outside the labour force (most of whom – 94 per cent – were involved in educational study) yet who claim they would like to work. In September 1996, almost 44 per cent of teenagers outside the labour force were in this situation.<sup>8</sup> This compares with just 25 per cent of teenagers outside the labour force in 1977. The rise in education participation thus disguises a rise in 'hidden unemployment' among teenagers.

#### Combining education with work

As documented in Figure 1, the decline in full-time labour force participation has been compensated, in part, by a growth in part-time labour force participation. Part-time employment among young people, however, has historically been combined with educational study and thus the growth in part-time working among young people implies an important change in the nature of the school-to-work transition process.

The data reported in Table 3 not only confirm the dominance of student workers among the ranks of the teenage part-time employed, but point to an increase in that dominance. In the mid-1970s, 73 per cent of teenagers working part-time were students. A decade on this proportion had risen to over 82 per cent. Since that time, and despite the decline in full-time job opportunities, the share has fallen only slightly, and in 1996 was still in excess of 81 per cent.

Year	FT students	PT students	All students
1976	na	na	73.0
1981	73.2	5.1	78.3
1986	78.3	4.1	82.4
1991	77.9	4.2	82.1
1996	78.9	2.4	81.2

# Table 3: Students as a share of teenage part-time employment (%), 1976–1996

<sup>&</sup>lt;sup>8</sup> Derived from ABS, *Persons Not in the Labour Force, Australia, September 1996, ABS cat. no.* 6220.0.

Sources: Data for 1976 are from the Population Census as cited in BLMR (1985, Table 2.5, p. 14). Data for the other years are from ABS, *Transition from Education to Work, Australia*, ABS cat. no. 6227.0.

The transition process from school to work has thus changed greatly over the last two decades. In the 1970s most young people would have entered the Work force on a full-time basis directly from school, often without completing secondary school and without any other intervening work experience. In effect, young people made a decision between education or work. Today the transition to full-time working is much more gradual and drawn out. Most young people will not find full-time employment until they are well into their 20s, will have a post-school qualification, and will have been exposed to the work force through part-time employment while studying. This is reflected in labour force data which reveals that the minimum age at which more than 50 per cent of young people are in full-time employment and not in full-time education has risen from 18 years in 1981 to 22 years today.<sup>9</sup>

Education and work are no longer alternatives, but complement each other as young people make the necessary adjustments in preparation for a future in the work force.

## The changing composition of teenage employment

### The end of full-time work and the rise of part-time work

As discussed above, the last two decades have seen an enormous growth in part-time labour force participation within the teenage labour market. This, in turn, has been stimulated by a marked growth in the availability of part-time jobs, such that part-time jobs now account for well over 60 per cent of total teenage employment. This concentration of young people in part-time work, however, has not always been obvious. As indicated in Table 4, in 1971 only eight per cent of employed teenagers worked on a part-time basis. Since then a marked shift in the composition of employment away from full-time jobs towards part-time jobs has occurred, and nowhere is this more marked than in the teenage labour market.

The part-time share in total employment among teenage males has increased more than six-fold since 1971 and, in 1997, stood at 52 per cent. Among teenage females the rise has been even more dramatic, with close to threequarters of all jobs held by teenage females being part-time jobs. In contrast, among prime-age adults growth has been much more subdued. Among prime-age adult women, for example, the share of part-time employment in total employment has remained relatively steady since the mid-1970s (at just over 40 per cent). Part-time jobs growth among prime-age adult males, on the

<sup>&</sup>lt;sup>9</sup> Using any employment rather than full-time employment sees the age of transition rise from 18 years to 21 years.

other hand, has been relatively rapid, but starting from a very low base. As a result, part-time working still represents less than seven per cent of all jobs held by prime-age adult males.

By definition, an increase in the part-time share of employment implies a fall in the full-time share. Thus the fall in the full-time employment share within the teenage labour market has been just as dramatic as the rise in the parttime employment share. The changing employment shares,

	1971	1976	1981	1986	1991	1996	1997
Males							
Teenagers	7.9	12.7	18.1	26.9	42.0	51.6	52.4
Young adults	2.3	5.9	5.5	7.8	12.2	18.9	19.4
Prime-age adults	1.3	2.1	2.9	3.3	4.5	6.0	6.8
Mature-age adults	7.9	9.2	10.2	12.1	17.0	18.5	19.2
Total	3.0	4.4	5.5	6.7	9.2	11.7	12.2
Females							
Teenagers	8.6	19.3	27.5	38.3	60.2	73.5	73.6
Young adults	14.1	10.6	15.5	18.2	17.6	30.9	35.3
Prime-age adults	34.1	40.4	41.4	41.6	41.2	40.3	41.1
Mature-age adults	35.0	42.5	45.0	50.8	48.7	52.8	50.2
Total	25.7	33.5	35.7	37.9	40.9	42.6	43.5

#### Table 4: Part-time share of employment by age and sex, 1971 to 1997 (%)

Note: Data relate to August of each year.

Source: ABS, The Labour Force, Australia, ABS cat. nos 6203.0 and 6204.0, various issues.

	1971	1976	1981	1986	1991	1996	1997
Teenagers	565.5	511.5	510.6	424.3	276.0	221.0	204.9
Young adults	788.8	762.2	850.7	838.8	794.0	765.6	687.6
Prime-age adults	2960.1	3191.7	3437.8	3841.0	4337.2	4708.7	4725.3
Mature-age adults	625.2	571.6	538.1	504.6	498.7	540.9	560.7

Note: Data relate to August of each year.

Source: ABS, The Labour Force, Australia, ABS cat. nos 6203.0 and 6204.0, various issues.

however, only reveal part of the shift in teenage work patterns that has been taking place. Full-time employment within the teenage has been declining not only in a relative sense, but also in absolute terms. As documented in Table 5, the number of teenagers in full-time work has, more than halved since 1971. In contrast, among prime-age adults, full-time employment numbers have continued to rise (by 60 per cent between 1971 and 1997), but not by enough to prevent the share of full-time employment in total employment from falling.

#### The casualisation of the teenage work force

As Dawkins and Norris (1990) have observed, the growth in part-time employment is closely bound up with the growth in casual employment. Table 6 compares the share of casual employment in total employment in August 1996 with that in August 1984 (the earliest date for which comparable data are available), where casual employment is defined by the absence of entitlements to both paid annual leave and paid sick leave. As can be seen, for all age and sex groups, the share of casual employment in total employment has increased broadly in line with the part-time shares

	1984	1996
Males		
Teenagers	24.4	55.3
Young adults	11.9	28.8
Prime-age adults	6.6	16.1
Mature-age adults	8.5	26.8
Total	9.1	21.2
Females		
Teenagers	35.9	69.7
Young adults	16.7	30.5
Prime-age adults	27.1	27.2

# Table 6: Casual share of employment by age and sex, August 1984 and August 1996 (%)

Mature-age adults	25.9	37.9
Total	26.1	32.0

Note: These data only relate to employed persons aged 15 and over who worked in their main job for an employer for wages or salary, or in their own business if that business was a limited liability company. Employment status is determined by the main job held.

Source: Unpublished data from the ABS Labour Force Supplementary Survey, August 1984 and August 1996.

presented in Table 4. In total, 26 per cent of employees are estimated to have been working on a casual basis in 1996, compared with about 16 per cent 12 years earlier. Again, the share is highest among teenagers, and especially teenage females, where the share of casual employment in total wage and salary earner employment is now approaching 70 per cent. As with part-time employment, the casual employment share has remained largely unchanged among prime-age adult females.

The high incidence of both part-time and casual employment among teenagers is, in part, a function of the large numbers of young people who are unavailable for full-time work because they are involved in study. In Table 7, for example, the teenage work force is disaggregated into four distinct groups according to employment arrangements (full-time permanent employees, part-time permanents, full-time casuals, and part-time casuals) after first separately identifying (full-time) students and non-students. Almost all of the student employees (97.6 per cent) are part-time workers, and the large majority of these are casuals as well. In contrast, among the non-students, the incidence of both part-time employment and casual employment is much lower (24.8 per cent and 31.5 per cent respectively). Indeed, for teenage females who are non-students, the part-time employment share is actually quite a deal lower than for prime-age adult females (36.5 per cent compared with 40.3 per cent). Part-time adult women, however, have a greater likelihood of being in permanent jobs and hence the casual share is still higher among teenage non-student females (35 per cent) than among adult females (27 per cent).

### Are part-time jobs 'bad' jobs?

It is often assumed that the rising incidence of part-time employment, and especially part-time casual employment, is an undesirable trend. Campbell (1996), for example, highlights the disadvantages associated with casual employment — lack of entitlement to many employment benefits, high levels of employment insecurity, relatively low and volatile earnings, irregular hours, and lack of effective union representation. Even more worrying is the possibility that exposure to part-time and casual employment may result in young people being denied access to the same career paths and training and promotion opportunities that are available to members of the permanent work force (Romeyn 1992, p. 67).

In fact, analysis of data from the 1993 Survey of Training and Education indicates that the concentration of young people in part-time and casual jobs does not account for the generally low levels of participation by young people in formal employer-sanctioned training (Wooden 1996a). That is, relatively low levels of participation in formal training courses while employed were common to all teenagers irrespective of their employment status, and presumably reflects employer concerns about investing in human capital which is perceived to be highly mobile.<sup>10</sup>

	Males	Females	Persons
	marco	rentaco	1 0100115
Students			
Full-time permanent	2.4*	0.8*	1.5*
Part-time permanent	6.4	5.2	5.7
Full-time casual	1.5*	0.5*	0.9*
Part-time casual	89.7	93.5	91.9
Non-students			
Full-time permanent	68.0	56.5	63.3
Part-time permanent	3.1	8.2	5.2
Full-time casual	15.4	7.0	11.9
Part-time casual	13.5	28.3	19.6
Total			
Full-time permanent	40.2	23.9	32.1
Part-time permanent	4.5	6.4	5.5
Full-time casual	9.4	3.2	6.3
Part-time casual	45.9	66.5	56.1

#### Table 7: Composition of teenage employees by study status and sex, August 1996 (%)

Notes These data only relate to employed persons who worked in their main job for an employer for wages or salary, or in their own business if that business was a limited liability company. Employment status is determined by the main job held.

\* Relative standard error high (greater than 25 per cent) and hence estimate may be unreliable.

Source: Unpublished data from the ABS Labour Force Supplementary Survey, August 1996.

<sup>&</sup>lt;sup>10</sup> This is compensated for, at least in part, by high levels of relatively inexpensive unstructured on-the-job training within the teenage work force and by greater levels of participation by teenagers in institution-based education.

Furthermore, if part-time employment is so undesirable, then it does not appear to be reflected in the hours preferences of most young people. Only about one-quarter of teenage employees in part-time jobs express preferences for work involving longer hours, though it is true that this proportion has gradually increased over the last two decades (see Table 8).<sup>11</sup> It is, however, very important to distinguish between students and non-students. Most of the young part-time job holders who are not interested in full-time employment are full-time students. Among non-students in part-time work, the proportion expressing preferences for longer working hours is much higher. Indeed, the proportion of teenage non-students in part-time employment who desire employment offering longer hours - 65 per cent of females and 72 per cent of males - is considerably greater than among the adult workforce.<sup>12</sup>

	1981	1986	1991	1996	1997
Males					
Teenagers	21.1	20.8	26.2	29.3	28.2
Young adults	28.0	39.9	45.4	44.5	41.6
Prime-age adults	26.2	35.6	49.0	47.6	52.1
Mature-age adults	4.0*	11.5	17.6	19.2	18.4
Total	20.0	26.5	35.4	37.0	38.4
Females					
Teenagers	21.2	23.1	26.4	23.7	23.7
Young adults	22.6	26.4	36.4	35.6	37.5
Prime-age adults	9.5	13.8	19.2	19.6	20.2
Mature-age adults	5.0*	5.1	9.4	8.7	10.0
Total	11.5	15.1	20.8	20.7	21.5

#### Table 8: The incidence of underemployment among part-time workers by age and sex, 1981–1997 (%)

Notes: Data relate to August of each year.

\* Relative standard error high (greater than 25 per cent) and hence estimate may be unreliable.

Source: ABS, The Labour Force, Australia, ABS cat. nos 6203.0, various issues.

<sup>12</sup> The figures cited are derived from unpublished data provided by the ABS from the August 1997 Labour Force Survey.

<sup>&</sup>lt;sup>11</sup> This compares with about 50 per cent of prime-age adult males and 21 per cent of prime-age adult females.

This distinction between students and non-students is highlighted in the interview-based research reported in Baker, Fan and Robertson (1995). They concluded that the experiences and aspirations of students differ substantially from those of non-students. More specifically, they observed that part-time and casual work is typically described in a positive light by students — a source of valuable income and work experience while studying, yet at the same time not overly impinging on study time. Non-students, on the other hand, were found to be much more likely to be working part-time simply because full-time work could not be found.

If part-time and/or casual jobs are 'bad' jobs, then exposure to such jobs when young must be associated with a tendency to remain in such jobs once older. This argument will not apply to most students, where casual employment is likely to have little bearing on employment obtained after completion of school and post-school education. In contrast, this argument is likely to apply with much greater force to early school leavers who accept part-time casual employment only because more secure employment could not be found. Such persons may find that the early cessation of formal education in combination with the lack of exposure to structured work-based training will impede skills acquisition and ultimately have serious detrimental effects on future employability.

### The industrial and occupational composition of teenage employment

The distribution of teenage employment across industries and occupations has always been very different to that of older workers (see BLMR 1985). As shown in Table 9, teenagers are relatively highly concentrated in a small number of industrial sectors, and especially Retail trade. In August 1996 this sector accounted for 48 per cent of all teenage employment. Moreover, this high concentration of teenagers in retail trade has increased, with the proportion employed in Retail trade falling by three percentage points since 1991.

Perhaps more significantly, the concentration of teenagers in this industry sector is more than three times that for the total work force, as measured by the Relative Concentration Ratio (RCR). The only other industry divisions where there are noticeably high concentrations of teenagers (as reflected in RCRs well above one) are Accommodation, cafes and restaurants and Cultural and recreational services.

In summary, teenagers are highly concentrated in one major industry sector — Retail trade — though relative to adult workers, relatively high concentrations are also found in the service sectors supporting tourism and recreation. Part-time and casual employment is widespread in all of these industries, suggesting that the greater willingness of teenagers to accept parttime and casual work may partly explain the high incidence of teenage employment in these industries. As discussed in greater detail in Wooden (1996a, pp. 24-30), these industries are also low training industries, suggesting that another explanation for the relative attraction of teenage employment in these industries may lay lie in their relatively lower wage costs, given many awards (and certainly all awards that apply in the retail trade sector) specify wage rates for teenagers (or juniors) that are some fraction of the adult rate.

Teenagers are also concentrated in specific occupations, though the data presented in Table 10 are too highly aggregated to demonstrate the full effect of this segmentation. According to these data, teenage male employees are concentrated in three major occupational groups — Labourers and related workers, Tradesmen (reflecting the role of craft-based apprenticeships) and Salespersons and personal service workers. Together, these three groups account for close to 90 per cent of all teenage male employment. Furthermore, in all three of these cases teenagers are over-represented relative to adult males.

	1991					19	996	
	М	ales	Females		M	Males		nales
	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>
Agriculture, forestry & fishing	6.3	0.96	1.8	0.49	7.0	1.12	2.0	0.55
Manufacturing	15.1	0.85	4.4	0.47	15.4	0.89	3.4	0.41
Construction	10.5	1.03	0.6	0.31	7.8	0.71	0.8	0.36
Wholesale trade	6.3	0.81	2.9	0.60	4.9	0.69	1.8	0.41
Retail trade	38.5	3.22	51.0	2.97	40.4	3.13	56.8	3.25
Accommodation, cafes, etc.	6.5	1.97	8.1	1.38	6.6	1.85	8.4	1.43
Property & business services	3.6	0.45	5.6	0.67	6.1	0.64	6.4	0.63
Finance and insurance	2.0	0.55	4.8	0.81	1.0	0.36	1.6	0.33
Health & community services	1.2	0.29	6.6	0.41	1.0	0.27	5.7	0.35
Cultural & recreational services	2.0	1.09	2.9	1.15	2.8	1.41	3.5	1.35
Personal & other services	2.2	0.70	5.8	1.33	1.8	0.54	5.6	1.32
Other <sup>b</sup>	6.0	0.27	5.5	0.28	5.1	0.25	4.0	0.20
TOTAL	100.0		100.0		100.0		100.0	

# Table 9: Industrial distribution and relative concentration of teenageemployment by sex, August 1991 and August 1996

Notes:	a RCR denotes relative concentration ratio (proportion of teenagers employed in each industry relative to the proportion of all employed persons working in that industry).
	b Comprises: Mining; Electricity, gas and water supply: Transport & storage; Communication services; Government administration and defence; and Education.
Source:	Unpublished data from the ABS Labour Force Survey.

In contrast, among teenage females, one occupational grouping – Salespersons and personal service workers – stands out as the most dominant, accounting for two-thirds of all female teenage employment.

Additionally, more recent data suggests that even within these groupings, teenagers are concentrated in relatively low skilled occupations. In August 1996 the Australian Bureau of Statistics (ABS) introduced a new occupation classification system that is more closely related to skills than the previous system. In particular, it distinguishes between clerical, service and sales jobs that involve advanced, intermediate or elementary skills. Teenagers are predominantly employed in the latter types of jobs. Indeed, in August 1997, 58 per cent of teenagers were employed in either elementary clerical, sales and service occupations or in largely unskilled labourer occupations. The comparable proportion among prime-age adults was just 16 per cent.

Finally, comparisons over time, even though limited here to just a five-year period, suggest a shift in the composition of teenage employment towards less skilled employment.

	1991				1996			
	Males		Females		Males		Females	
	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>	%	RCR <sup>a</sup>
Managers & administrators	1.0	0.06	0.3	0.05	0.4	0.03	0.3	0.05
Professionals	1.3	0.10	1.8	0.14	0.7	0.05	1.9	0.13
Para-professionals	1.9	0.36	1.0	0.15	1.7	0.32	0.5	0.08
Tradespersons	30.3	1.26	4.7	1.27	25.1	0.11	3.6	1.03
Clerks	4.2	0.61	21.2	0.67	4.6	0.75	13.6	0.46
Salespersons & personal serv wrkrs	20.7	2.26	58.5	2.57	21.0	1.97	66.5	2.55
Plant & machine operators & drivers	3.9	0.37	1.3	0.46	4.0	0.38	0.6	0.30
Labourers & related workers	36.6	2.13	11.3	0.89	42.6	2.54	13.1	1.08
TOTAL	100.0		100.0		100.0		100.0	

# Table 10: Occupational distribution and relative concentration of<br/>teenage employment by sex, May 1991 and May 1996

Notes: a RCR denotes relative concentration ratio (proportion of teenagers employed in each occupation relative to the proportion of all employed persons working in that occupation).

Source: Unpublished data from the ABS Labour Force Survey.

#### Firm size

Another interesting feature of teenage employment is that it tends to be concentrated in small firms. As reported in Table 11, data on wage and salary earner employment from the 1993 Survey of Training and Education indicates that 43 per cent of teenage employees (exclusive of persons still at school) were employed in businesses with fewer than 20 employees, compared with only 22 per cent of adults. Further, this difference was not simply a product of the different industrial mixes of the two populations, with a higher concentration of teenage employees in small business being a characteristic of employment in Manufacturing, Construction, Transport and storage, Finance, property and business services and Community services. Strangely enough, only in Wholesale and retail trade, the sector which accounts for the largest share of teenage workers, was there any evidence of teenagers being more concentrated in large businesses than their adult counterparts.

One likely explanation for this prevalence of teenage employees in small business is the lesser importance of human capital and skills to small business. As documented at length in Wooden (1996b), small businesses are far less likely to invest in training and is reflected in a much higher concentration in small businesses of jobs with low skill requirements.<sup>13</sup> Such jobs, however, while they may not offer significant training opportunities, are ideally suited, at least from the perspective of employers, for unskilled, inexperienced workers. Moreover, teenage workers are especially attractive given awards typically specify that they need only be paid a proportion of the adult rate (usually varying between 40 per cent and 80 per cent of adult rates depending on age).

# Table 11: Wage and salary earner employment by firm size and industry (%) — teenagers and adults compared

Firm	Signif. of		
<20	20-99	100 or more	difference <sup>a</sup>

Agriculture

<sup>&</sup>lt;sup>13</sup> Factors cited by Wooden (1996b) as underlying the lower levels of training in small business include: scale economies in the provision of training; the absence of well developed internal labour markets; and the relatively high rates of failure among small businesses.

Teenagers	76.0	11.7*	12.3*	
Adults	67.7	13.3	18.9	ns
Manufacturing				
Teenagers	46.0	20.4	33.6	
Adults	18.1	14.5	67.3	< 0.001
Construction				
Teenagers	78.4	13.7*	7.9*	
Adults	50.9	16.1	33.0	< 0.001
Wholesale & retail trade				
Teenagers	33.1	8.5	58.4	
Adults	37.1	16.3	46.6	< 0.001
Transport & storage				
Teenagers	52.2*	**	32.1*	
Adults	14.7	10.1	75.2	< 0.001
Finance, property & business				
Teenagers	53.6	17.7*	28.8	
Adults	24.8	11.2	64.0	< 0.001
Community services				
Teenagers	32.1	14.3*	53.7	
Adults	13.6	13.6	72.8	< 0.001
Recreation & personal service				
Teenagers	46.6	25.9	27.5	
Adults	41.6	20.4	38.0	ns
Total <sup>b</sup>				
Teenagers	42.9	14.0	43.1	
Adults	22.4	13.5	64.1	< 0.001

Notes: The data relate to all employed wage and salary earners, except persons still at school. Adults are defined as persons aged 25 years and over.

a Probability that the difference in the distribution of employment between teenagers and adults is zero.

b Also includes: Mining; Electricity, gas & water; Communication; and Public administration & defence.

\* Relative standard error high (between 25 and 50 per cent) and hence estimate may be unreliable.

\*\* Relative standard error too high (greater than 50 per cent) to be of any practical use.

Source: Unpublished data from the ABS 1993 Survey of Training and Education.

## **Teenage unemployment**

### The unemployment rate

Undoubtedly the most serious youth labour market issue has been the rise and persistence of unemployment. As documented in Figure 2, teenage unemployment rates have risen from around three per cent in 1970, to around 20 per cent today (but peaking at 25 per cent in 1992). In large part, the deterioration in the teenage labour market is simply a function of the deterioration in the wider labour market, with movements in the teenage unemployment rate being mirrored by movements in the total unemployment rate. Indeed, the ratio of teenage unemployment to total unemployment fell from about three in the mid-1970s to just under 2.5 by the early 1980s and has not changed greatly since. Further, the share of teenage unemployment in total unemployment has actually fallen over this period (see Hardin and Kapuscinski 1997, p. 9). Nevertheless, teenage unemployment remains of particular importance because of the potential for 'scarring'. That is, unemployment when young almost certainly increases the likelihood of individuals being exposed to unemployment as adults. Both Junankar and Wood (1992) and Hardin and Kapuscinski (1997) have reported evidence for this scarring effect using data from the Australian Longitudinal Survey.

### Figure 2: Teenage and total unemployment rates, 1970–1997





Very differently, it has been claimed that the official unemployment rate overstates the extent of joblessness among youth. Prime Minister Keating in the run-up to the 1996 federal election, for example, claimed that rather than the official rate of 21 per cent that prevailed at the end of 1995, seven per cent would be a fairer reflection of the true jobless rate among teenagers. The argument here is that the denominator in the unemployment rate calculation – the labour force – may be increasingly less useful for evaluating change in the state of the labour market. As noted earlier, as participation in education has increased, labour force participation among young people has commensurately declined. Consequently, while the measured unemployment rate may be rising, the pool of young people available for work may be declining.

The ABS in its June 1995 issue of *The Labour Force* put forward a number of alternative unemployment ratios for evaluating the teenage labour market. Three of these measures are graphed against the conventional unemployment rate (UR) in Figure 3. As can be seen, how the unemployment measure is constructed has enormous implications for what is concluded about trends in teenage unemployment. If either the conventional unemployment rate or the unemployment to population ratio (U2) is preferred, the conclusion that would be drawn is that the teenage labour market is only marginally healthier than it was during the 1983 recession. On the other hand, if the full-

time unemployment rate (U1) is preferred (as appears to be advocated in the Report of the House of Representatives Standing Committee on Employment, Education and Training [1997, p. 7]), it would be concluded that things are in fact still much worse than in 1983. Finally, if the unemployment to 'fully active' (those in the labour force plus persons in full-time education) ratio (U3) is preferred, the conclusion that would be drawn is that, over the longer term, the teenage labour market has markedly improved.



Figure 3: Alternative measures of teenage joblessness, 1979–1997

Which of these measures is to be believed? Anecdotal evidence suggests that the latter statement is difficult to believe. Could it really be that job opportunities for teenagers have been improving over time? Ultimately, the problem with measures which attempt to take into account participation in education is that the decision to continue in education will itself be a function of the level of employment opportunities. As a result, it seems reasonable to assume that a good proportion of those still involved in education are only there because work cannot be found. A better measure of under-utilisation in the teenage labour market would involve identifying these 'hidden unemployed' and incorporating them into the under-utilisation measure.

Source: ABS, The Labour Force, Australia, ABS cat. nos 6203.0, various issues.

Unfortunately, identifying such individuals is no simple matter. The ABS, for example, provides estimates each September of what it labels discouraged job seekers. In 1996 the number of discouraged job seekers aged between 15 and 19 years was just 5700. Inclusion of these individuals within the unemployment pool would have an imperceptible impact on the measured unemployment rate. At the other extreme, the ABS also provides estimates of the total number of persons who would like to work (and were available to start work) even though they were not actually looking for such work. In September 1996, teenagers fitting this description numbered 159 500, most of whom gave their main reason for non-participation in the labour force as participation in education. If these individuals were added to the number of unemployed, the unemployed to fully active ratio would (in September 1996) rise from 7.4 per cent to almost 22 per cent; a level in excess of the official unemployment rate.

The bottom-line is that without better data on employment aspirations, the conventional unemployment rate measure remains our best guide to how the state of the teenage labour market is changing over time, and this measure suggests the long-term trend is upwards. Australia, however, is currently on the upward swing of the economic cycle and hence both the teenage and the total unemployment rate are currently trending downwards.

### **Unemployment duration**

While the relationship between the rates of teenage and adult unemployment may not have changed greatly over the last two decades, the relationship between the duration of teenage unemployment and the duration of adult unemployment has. As noted earlier, young people can be expected to have shorter durations of unemployment than older workers. Table 12, however, also indicates that over the course of the last 16 years the average duration of unemployment among teenagers has not greatly changed, whereas for primeage adults the mean length of unemployment duration has increased by almost 70 per cent.

Such results would seem to suggest that the unemployment experience has become much more severe for adults relative to teenagers. Such conclusions would be misleading. Young people become adults, and hence the duration of teenage unemployment will be truncated by the aging process. Further, the increased rates of participation in education, by delaying the time at which young people enter the labour force, work against any increase in average unemployment duration among teenagers.

# Table 12: Average duration of unemployment by age,1981-1997 (weeks)

Year	Teenagers	Young adults	Prime-age adults

1981	25.4	32.4	38.0
1986	29.8	43.4	55.7
1991	25.1	36.8	46.6
1996	27.0	37.1	55.5
1997	25.6	43.4	64.2

Note: Data relate to August of each year.

Source: ABS, The Labour Force, Australia, ABS cat. nos 6203.0.

## **Relative earnings**

It is widely believed that the much higher rates of unemployment among teenagers reflect wage structures which cause youth to be overpriced in the labour market. The earnings of young Australians relative to their adult counterparts, however, have fallen noticeably over the last two decades, yet despite this, the gap between youth and adult unemployment rates has not greatly changed.

As documented in Table 13, the ratio of junior hourly earnings to adult hourly earnings has fallen for both males and females, and for both full-time and part-time workers. Moreover, the fall has been quite large, especially for full-time workers.

Simple data such as these, however, may disguise more than they reveal. For example, these data do not hold constant shifts in the industrial composition of youth employment. If relative youth pay rises in one sector but not in another, economic theory suggests a substitution of labour out of the higherpaying sector into the lower-paying sector. Average earnings within the total youth work force, however, could fall as a consequence of the greater proportion of youth now working in the lower paying sector, even though the costs of youth labour have actually risen. Indirect evidence on such substitution effects is provided in Table 14, which correlates data on teenage wage and salary earner employment by industry over the period August 1986 to August 1996 by average youth earnings in those industries. This table reveals that the share of teenage full-time

# Table 13: Relative earnings of juniors by sex and hours worked,1981-1996 (%)

Year	Ma	les	Females		
	Full-time	Part-time	Full-time	Part-time	

1981	58.8	58.3	63.7	63.7
1986	50.2	57.4	57.1	60.0
1991	51.1	57.0	56.0	59.7
1995	45.3	53.9	51.8	58.2
1996	45.5	na	51.7	na

Notes: Relative earnings are represented by average hourly earnings of junior non-managerial employees as a percentage of average hourly earnings of adult non-managerial employees, where juniors are those employees who are under 21 years of age and are not paid at the adult rate for that occupation.

The data apply to the month of May in each year and only relate to wage and salary earners in the civilian non-farm work force who received pay during the survey reference period.

Source: ABS, Employee Earnings and Hours, Australia (ABS cat. no. 6306.0), various issues.

employment accounted for by both relatively low-paying industries, such as retail trade and property and business services, and average paying industries, such as accommodation, cafes and restaurants and manufacturing, has increased, while in higher paying sectors such as mining, finance and government administration, the share has fallen. This will have the effect of reducing the rate of earnings increase for teenagers below what it would otherwise have been if industrial structure had not changed. However, changes in industrial composition have also been affecting the adult labour market and, as a consequence, the net effect on the measured relative earnings of teenagers is relatively small.<sup>14</sup>

Indeed, the key feature of Table 14 is not the relationship between the changing composition of full-time employment and teenage earnings, but the relationship with the substitution of part-time jobs for full-time jobs. Among the 'high pay industries' there has been very little part-time job growth, with part-time job growth over the period 1986 to 1996 representing less than five per cent of the full-time job losses. In the 'average pay industries' part-time job growth has been more substantial (but dominated by the accommodation, cafes and restaurant sector), but still not adequate to prevent a substantial fall in total employment. Finally,

#### Table 14: Average weekly earnings of juniors by industry and the changing industrial composition of teenage employment

<sup>&</sup>lt;sup>14</sup> Changes in the age composition of the teenage labour force might also affect the measured relative earnings of teenagers. Such effects, however, are very small. Between August 1981 and August 1986 the average age of the teenage work force varied only slightly, falling from 17.6 to 17.4 years. For full-time teenage workers, the reverse is the case, but the size of the change is again small — rising from 17.8 years to 18.1 years.

Industry	FT average weekly earnings, 1996 (\$)	Share of teenage FT employment, 1986 (%)	Share of teenage FT employment, 1996 (%)	FT teenage employment growth, 1986-1996 (%)	PT job growth as a % of FT job losses
High pay industries		23.7	17.7	-61.5	4.9
Mining	460.40	1.4	0.7*	-19.6	**
Finance & insurance	367.90	9.9	2.7	-86.2	3.0*
Construction	358.50	7.2	10.9	-21.5	-4.7
Communication	349.60	1.3	1.1*	-56.4	38.7*
Government admin.	342.30	3.9	2.4	-68.7	8.9*
Average pay industries		31.8	34.1	-44.8	31.6
Manufacturing	335.90	19.2	20.8	-44.2	-0.8
Electricity, gas & water	329.10	1.5	**	-90.5	**
Transport & storage	324.70	2.8	2.1	-61.9	4.1*
Wholesale trade	324.30	5.7	5.9	-46.6	1.8
Accommodation, cafes, etc	324.20	2.6	5.1	-0.9	18800.0
Low pay industries		44.4	48.2	-44.1	144.3
Retail trade	309.90	25.7	26.8	-46.2	189.7
Personal & other services	309.20	4.2	5.6	-32.4	114.0
Cultural & recreation servs	302.20	1.7	1.4*	-56.9	39.0
Education	301.70	1.1	0.8*	-61.7	89.7
Property & business servs	300.00	6.1	9.9	-16.3	197.4
Health & community servs	264.70	5.6	3.7	-65.9	34.0

Notes: All data used relate to non-farm employees (ie., wage and salary earners). The earnings data, however, exclude managerial employees, whereas these employees are included in the employment data.

\* Relative standard error high (between 25 and 50 per cent) and hence estimate may be unreliable.

\*\* Relative standard error too high (greater than 50 per cent) to be of any practical use.

Sources: ABS, Employee Earnings and Hours, Australia, May 1996 (ABS cat. no. 6306.0).

Unpublished data from the ABS Labour Force Survey.

in the 'low pay industries', part-time job growth has been so rapid that total employment has increased, with the new part-time jobs representing 144 per cent of the lost full-time jobs.

Returning to the relative earnings data, Table 13 also reveals nothing about changes in the underlying productivity of youth labour. As argued by both Sweet (1995) and Sloan and Taylor (1995), the rise in school retention and the increase in participation in higher education has meant:

- (i) a reduction in the average quality of teenage labour making themselves available for employment; and
- (ii) a decline in the average level of work-related experience and skills possessed by young people at all ages above the minimum school leaving age.

The consequences of these changes are that employers may actually find themselves paying more for inexperienced workers. As Sweet (1995, p. 107) has pointed out, compared with two decades ago, most school leavers now enter the labour market two years later, but without any other noticeably different characteristics. Given junior wage relativities (as prescribed in awards) have remained unchanged (see DIR 1996, p. 6), employers of school leavers would in effect be paying more for inexperienced school leavers than they did 20 years ago.<sup>15</sup> Moreover, the increased cost is large. In a typical award offering junior rates of pay (such as the NSW Shop Employee's (Store) Award), a 16-year old only earns 50 per cent of the adult award rate. For an 18-year old, the ratio is 70 per cent. The effective cost of employing school leavers has therefore increased by around 40 per cent.

Overall, it is suspected that the fall in relative earnings of junior employees does not reflect any underlying fall in the cost of teenage labour, but instead is the result of declines in the relative productivity of teenagers. Data deficiencies, however, necessitate that these conclusions be treated with caution. Further, evidence is clearly required in order to determine the level of confidence which can be attached to these conclusions.

# Conclusions

It is very difficult to understate the magnitude of change that has affected the teenage labour market over the last quarter of a century. The most significant change has been the decline in the number of full-time job opportunities, which in turn has helped fuel the marked increases in school retention and

<sup>&</sup>lt;sup>15</sup> While the assessment of the then Department of Industrial Relations is that award relativities for juniors have not changed much since 1983, there is evidence of substantial variability across awards. In the retail trade sector, the various State awards appear to be converging on the rates that apply in the New South Wales award, and has typically meant some small increases in award rates of pay at some ages. In the Clerical and Administrative Employees (NSW) Award, on the other hand, junior pay (as a proportion of the minimum based adult rate) has declined by between three and four percentage points at all ages.

levels of participation in higher education observed in the 1980s and early 1990s.

Full-time jobs are gradually being replaced by part-time, casual jobs, the majority of which are highly concentrated in low-skill occupations in relatively low-paying industries. These new part-time, casual jobs, however, are not necessarily 'bad' jobs. Indeed, for teenagers still involved in full-time education, these jobs would appear to be largely consistent with individual preferences. Moreover, the absence of opportunities for training and skills acquisition is not particularly problematic given such jobs are unlikely to bear much relationship to the jobs sought after completion of study. For non-students, and especially early school leavers, however, the exposure to low skilled, casual jobs rather than more training intensive jobs, may well be problematic.

Even more worrying, of course, is the high incidence of unemployment among young people. While the level of joblessness among teenagers has not deteriorated relative to the level among adults, there are good reasons to suspect that spells of unemployment when young have a scarring effect, and increase the likelihood of individuals being exposed to further spells of unemployment when older. Success in tackling the youth unemployment problem would therefore help to lower unemployment rates within the adult population in the future.

Finally, there are good reasons to be concerned that the changing structure of the teenage labour market might have raised the cost of teenage labour. Despite an apparent fall in the measured earnings of juniors relative to adults, and even assuming no change in award wage relativities, employers today may find themselves paying more for inexperienced labour than 20 years ago. This results because the average school leaving age has effectively risen but most awards require employers to pay workers who are two years older more simply because of their age and not because they are necessarily more productive.

The policy conclusions that flow from this overview of the teenage labour market can be clustered into two categories. First, greater attention needs to be given to stimulating employer demand for youth labour, and especially early school leavers. The current federal government is hoping that the creation of a more competitive and, hopefully, more client-driven, market for employment services will facilitate better matching of job seekers to unemployed. This, however, will need to be bolstered by measures that: (i) provide incentives for service providers to place 'at risk' job seekers, including early school leavers; and (ii) encourage potential employers to hire these less attractive individuals. This might, for example, involve a return to greater use of wage subsidies. While subsidy schemes may not actually create many additional long-term jobs, they can at least help redistribute the burden of unemployment more equally.

Second, serious consideration must be given to youth wage structures. At a minimum, any shift towards competency-based pay must be abandoned. So-

called competency-based wage systems can be expected to penalise teenagers since such systems either: (i) will not account for intangible factors such as maturity and life experience which are valued by employers; or (ii) will be so administratively complex as to discourage employers from having their employees assessed and thereby effectively removing the cost incentive for employing teenagers provided by age-based pay systems. If the obstacles generated by anti-discrimination laws cannot be overcome, then the experience-based progression system provided by the National Training Wage would be a second-best solution though, as argued in the Report of the House of Representatives Standing Committee on Employment, Education and Training (1997, pp. 81-82), this system is still much more complex to administer than a simple age-based progression.

## References

- Ashenden, D., *The Student-Workers: The Extent, Character, Consequences and Possibilities of Part-time Work by Secondary Students,* Australian Government Publishing Service, Canberra, 1990.
- Baker, M., Fan. M. and Robertson, F., 'Access to training by young part-time and casual workers: employee views', in M. Wooden (ed.), *The Growth of Part-time and Casual Work in the Youth Labour Market and Implications for Training Arrangements*, Report to the Vocational Education and Training Division, DEETYA, National Institute of Labour Studies, Adelaide, 1995.
- Brooks, C. and Volker, P.A., 'The probability of leaving unemployment: The influence of duration, destination and demographics', *Economic Record*, vol. 62, September 1986, pp. 296–309.
- Bureau of Labour Market Research (BLMR), *Youth Employment Patterns*, BLMR Research Report No. 5, AGPS, Canberra, 1985.
- Campbell, I., 'The growth of casual employment in Australia: Towards an explanation', in *Non-Standard Employment in Australia and New Zealand*, ed. J. Teicher, National Key Centre in Industrial Relations Monograph No. 9, Monash University, Melbourne, 1996.
- Dawkins, P. and Norris, K., 'Casual employment in Australia', *Australian Bulletin of Labour*, vol. 16, September 1990, pp. 156–173.
- Department of Industrial Relations, Submission to the House of Representatives Standing Committee on Employment, Education and Training: National Inquiry into the Employment of Young People, DIR, Canberra, July 1996.
- Gregory, R.G., 'Higher education expansion and economic change', *Australian Bulletin of Labour*, vol. 21, December 1995, pp. 295–322.
- Hardin, A. and Kapuscinski, C., 'Young Australians in unemployment: despair by any other name', Centre for Economic Policy Research, Discussion Paper No. 359, Australian National University, Canberra, January 1997.

- House of Representatives Standing Committee on Employment, Education and Training, *Youth Employment: A Working Solution*, Commonwealth of Australia, Canberra, 1997.
- Junankar, P.N. and Wood, M., 'The dynamics of youth unemployment: a preliminary analysis of recurrent unemployment', in Youth in the Eighties: Papers from the Australian Longitudinal Survey Research Project, eds R.G. Gregory and T. Karmel, Centre for Economic Policy Research, Australian National University, Canberra, 1992.
- Karmel, T., 'The demand for secondary schooling', in *The Economics of Education and Training 1995*, eds F. Ferrier and C. Selby Smith, Australian Government Publishing Service, Canberra, 1995.
- Larum, J. and Beggs, J.J., 'What drives Australian teenage labour force participation?', *Australian Journal of Statistics*, vol. 31A, 1989, pp. 125–142.
- Lewis, P.E.T. and Koshy, P., 'Youth employment, unemployment and school participation', Paper presented to the Conference of Economists '97, University of Tasmania, Hobart, 28 September–1 October 1997.
- McCormack, D., 'An analytical examination of youth labour and education', *Labour Economics and Productivity*, vol. 4, March 1992, pp. 19–44.
- Miller, P.W., 'The structure of Aboriginal and non-Aboriginal youth unemployment', *Australian Economic Papers*, vol. 28, June 1989, pp. 39–56.
- Norris, K. and Wooden, M., 'The changing Australian labour market: an overview', in *The Changing Australian Labour Market*, eds K. Norris and M. Wooden (Economic Planning and Advisory Commission Paper No. 11), Australian Government Publishing Service, Canberra, 1996.
- Organisation for Economic Cooperation and Development (OECD), *Employment Outlook, July 1996*, Paris, OECD.
- Romeyn, J., *Flexible Working Time: Part-time and Casual Employment*, Industrial Relations Research Monograph No. 1, Department of Industrial Relations, Canberra, 1992.
- Sloan, J. and Taylor, A., *The Youth Labour Market: Age- or Competency-based Wages*, Report prepared for Business Victoria, National Institute of Labour Studies, Adelaide, 1995.
- Sweet, R., 'The naked emperor: training reform, initial vocational preparation and youth wages', *Australian Economic Review*, No. 110, 2nd Quarter 1995, pp. 93–100.
- Wooden, M., *The Training Experience of Part-time and Casual Youth Workers: Evidence from the 1993 Survey of Training and Education,* National Institute of Labour Studies Working Paper Series No. 138, Adelaide, 1996a.
- Wooden, M., 'Firm size and the provision of employee training: an analysis of the 1993 Survey of Training and Education', Australian and New Zealand Journal of Vocational Education Research 4(2), 1996b, pp. 89–120.

Wooden, M., Robertson, F. and Dawkins, P., 'Part-time employment and participation and retention in higher education', *Australian Journal of Education*, vol. 38, November 1994, pp. 250–265.