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## **MINIMUM WAGES AND EMPLOYMENT: A REAPPRAISAL**

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## **Abstract**

*The effects of imposing a minimum wage is one of the most emotive and, yet, least understood issues in economic and labour market debates. Given the importance of this issue, particularly in the context of the debate over likely changes to implementation of the minimum wage to be introduced by the Howard government, it is timely to provide a reasoned analysis of the impacts of minimum wages. In this paper the extent of the unemployment problem is examined, the economics of the minimum wage is explained and appropriate policy prescriptions suggested. The success of these policies depends crucially on wage flexibility which is incompatible with the current minimum wage.*

## **Introduction**

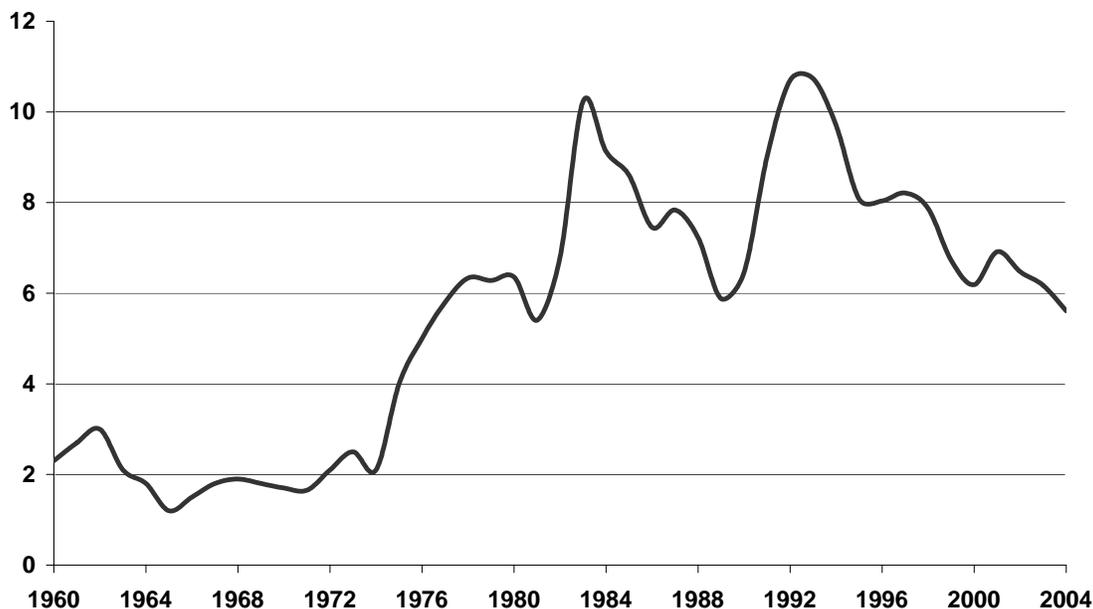
The effects of imposing a minimum wage is one of the most emotive and, yet, least understood issues in economic and labour market debates. Given the importance of this issue, particularly in the context of the debate over likely changes to implementation of the minimum wage to be introduced by the Howard government, it is timely to provide a reasoned analysis of the impacts of minimum wages.

This paper begins with a brief analysis of the extent of unemployment in Australia in order to provide an estimate of the potential increase in employment if demand and supply of labour could be brought into balance. An overview of the economics of the minimum wage is presented. This theoretical framework is then used to suggest appropriate policy agenda for reducing unemployment. Crucial to this agenda is reducing or removing the minimum wage.

## **How Big is the Problem?**

The Australian Bureau of Statistics (ABS) provides an internationally recognised measure of the unemployment rate. Figure 1 shows the history of the unemployment rate in Australia since the 1960s. Clearly, the historical average until the mid 1970s was about two per cent but rose almost continuously until the early 1980s. The so called 'oil shock' demanded considerable structural adjustment which was hindered by excessive regulation, including protection, plus lack of labour market flexibility, particularly downward wage rigidity, and, possibly inappropriate macroeconomic policy. The impact of the Accord in reducing real wages can be seen in the early 1980s and the impact of the huge rise in interest rates in the early 1990s is clearly evident. Over 14 years of extraordinary, by OECD standards, economic growth have been accompanied by a decline in the unemployment rate to about five per cent in January 2005 or 533 thousand people.

**Figure 1 Unemployment Rate, 1960-2004, per cent**



Source: Australian Bureau of Statistics, *AUSTATS* database

1980s and the impact of the huge rise in interest rates in the early 1990s is clearly evident. Over 14 years of extraordinary, by OECD standards, economic growth have been accompanied by a decline in the unemployment rate to about five per cent in January 2005 or 533 thousand people.

Three observations from figure 1 are clear. First, macroeconomic policy can be very effective in increasing unemployment, as witnessed by ‘the recession we had to have’ in the late 1980s. Second, there is ‘hysteresis’ in unemployment- one off shocks have long lasting, and possibly irreversible, effects- so policy makers must be extremely careful in tightening monetary policy. Third, as is evident from 14 years of remarkable economic growth, unemployment is not going to be solved by macroeconomic policy.

The reasons for the rise in unemployment have been discussed elsewhere (see, for instance, Lewis, 2004). In summary, a combination of external shocks, globalisation and technical change has significantly changed the nature of demand for labour while certain inflexibilities in the labour market have prevented adjustment to these demand changes. This has been most manifest in the relative growth in service sector employment, the growth of part-time and casual work, the relative decline in demand for manual skills, the growth in demand for knowledge based and people skills; and the decline in trade unionism. Perhaps the most significant impact has been on employment of males. Table 1 shows the annualised rate (not compounded) of growth in employment over different intervals of time.

**Table 1 Employment Growth, Annualised Percentage Change**

	<i>1981-2001</i>	<i>1993-2003</i>	<i>1998-2003</i>
Full-time Males	0.8	1.5	0.9
Full-time Females	2.5	2.2	1.8
Full-time Persons	1.2	1.4	1.3
Part-time Males	11.3	6.2	7.8
Part-time Females	5.7	4.4	4.7
Part-time Persons	6.8	4.9	5.5

Source: *Labour Force*, ABS Cat. No. 6203.0

The first column shows the annualised growth rate over the relatively long term, twenty years. In order to examine whether these growth trends were ‘one-off’ or continuing the remaining columns show the respective growth rates over the last ten and five years. Interestingly, it appears that the trends of the last two decades are fairly persistent with most recent growth rates similar to the longer term trends. By way of comparison the corresponding rate of growth in the adult population, which is approximately the growth in labour supply, was about 1.5 per cent.

The major trend in the Australian labour market is that the demand for full-time workers, particularly males, has not kept pace with supply. There has been a substitution of females, particularly part time females, for full-time males. For particular groups, the changes in demand have been particularly noticeable. For instance, a full-time job for anyone 15-20 years old is now an exception rather than the rule and employment prospects are poor for many displaced older males.

The shortcomings of the unemployment rate as an estimate of excess supply of labour are well known to labour economists but not widely understood by the community as a whole or even among those regarded as informed commentators. For instance, in the *Labour Force Survey*, from which the unemployment estimates are derived, it is only necessary to have worked for one hour in the survey week to be classified as employed. In order to be classified as unemployed respondents must pass a number of tests regarding their readiness for work and their efforts to actively seek work.

There are a number of other measures which through light on the extent of under utilisation of labour. One of these is the *underemployed*, those who are employed part-time but who would like to and are ready to work full-time, plus those who normally work full-time but at the time of the survey, because of economic circumstances, are working part-time. Another measure is the *marginally attached*, who want work but do not satisfy the strict availability criteria. They are those who are actively looking for work, but not available at the time of the survey or are available to start work but did not believe they could find a job. Another definition of marginal attachment is used by the ABS relates to those either looking for work, available for work or would look for work if they could. In September 2004 this stood at over 855 thousand persons.

**Figure 2 Labour Under-utilisation, 1993 and 2003, Per Cent**

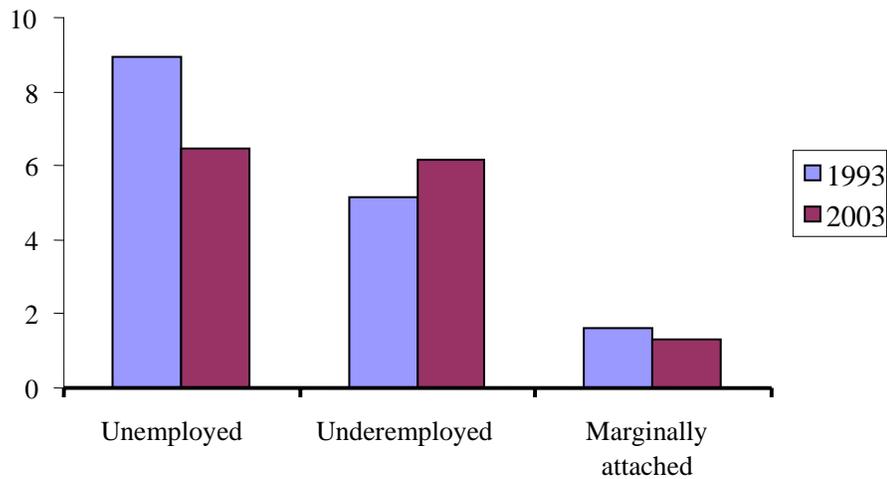
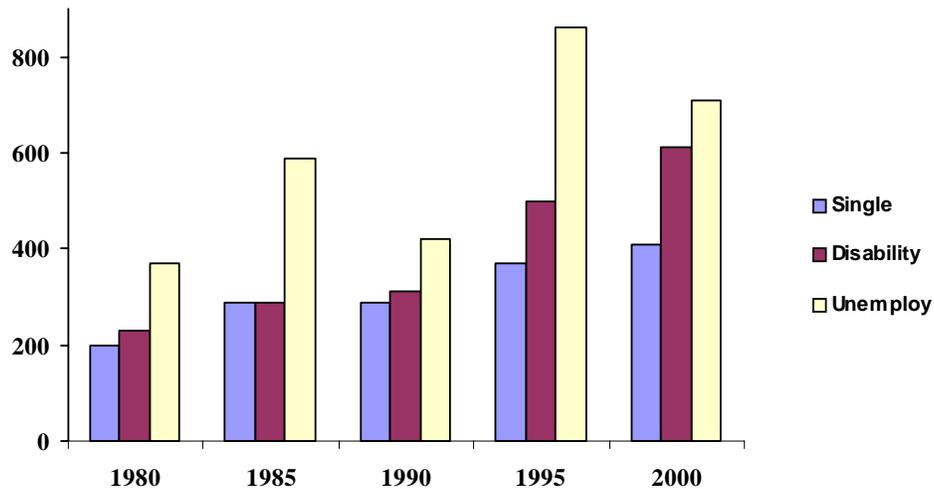


Figure 2 shows how these different measures have changed over the decade to 2003. Clearly the unemployment rate fell significantly over the period while the under employment rate actually rose while there was little change in the marginally attached. Thus, adding the underemployed and marginally attached more than doubles the official number of unemployed to about 1.3 million.

Those on social security payments is another possible indicator of unemployment. The ABS basis its estimates of the unemployed according to individual's responses to survey questions. However, eligibility for social security payments is determined by an individual's awareness of and the ability to convince Centrelink of eligibility for benefits.

Figure 3 shows how the number receiving certain categories, namely sole parent, disability and unemployment benefit changed over time. There are some interesting features of these data in terms of the number of recipients at any point in time and with respect to trends over time.

**Figure 3 Social Security Recipients, 1980-2000**



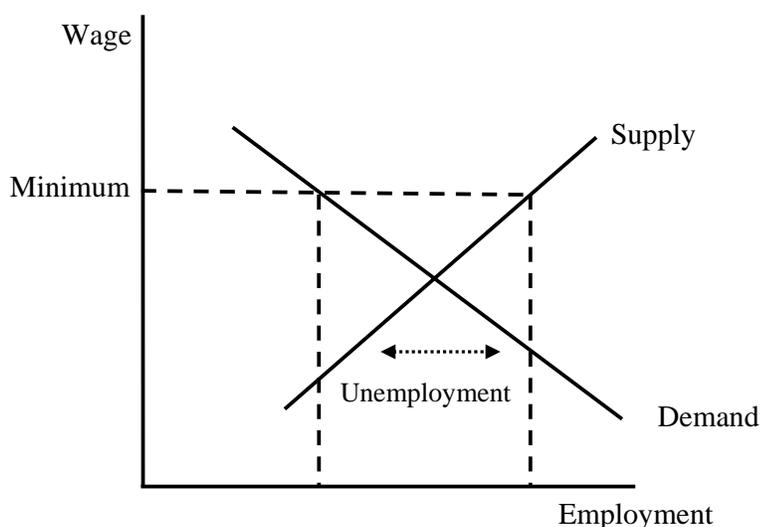
The number of people on unemployment benefit tracks roughly the ABS unemployment estimates. However, in every year the number of people receiving unemployment benefits exceeded the number unemployed- by 22 per cent in 2000! The number of people receiving single parent pensions more than doubled over the twenty years up to 2000. Perhaps most interesting is the rise in people on disability pensions in inverse relation to those on unemployment benefit. There appears to have been a movement from unemployment benefits to pensions which, while reducing the figures for those on unemployment benefits, is costly for government since pensions are indexed to average weekly earnings while unemployment benefits are indexed to the Consumer Price Index.

In summary the extent of the unemployment problem is somewhere between 533 thousand and 1.7 million people. By comparison, Argy (2005) estimates what he calls 'Joblessness' in Australia to be about 900 thousand people.

### **The Economics of the Minimum Wage**

The starting point here is the standard neoclassical analysis. The clue to understanding the minimum wage debate is the nature of the labour market. The concept of *the labour market* is an abstract one but is nevertheless useful for analysing issues such as the overall level of employment and unemployment. Every economics student will be familiar with the standard textbook treatment represented by figure 4 below.

**Figure 4 The Aggregate Labour Market**



This shows that if average wages are held at a minimum then labour supply exceeds labour demand and, therefore, unemployment results. There is considerable empirical research on the labour market in Australia and the effect of rises in average wages on employment (see, for instance Lewis and Seltzer, 1996, Lewis and MacDonald, 2002). This research indicates that a 10 per cent increase in average wages reduces employment by about 8 per cent. Thus, moderation in *average* wages increases employment and, with the usual caveat that all other things are equal, unemployment will fall.

It is tempting to use the above analysis to examine the effects of imposing a minimum wage for the lower paid. However, the above analysis is *not* appropriate. Since most workers would obtain a wage higher than the minimum anyway, the effect of imposing a minimum wage is to increase the wages only of those who would otherwise receive the lowest wages. The effect on the *average* wage is small and, thus, the impact on total employment and unemployment is also small. This theoretical argument is supported by international empirical evidence which shows that the impacts of minimum wages on *total* employment and unemployment are small (Brown, Gilroy and Kronen, 1982). Leigh (2003) also presents evidence for Australia which indicates a small but significant effect.

It is worth digressing somewhat here. In recent years there has been a concerted campaign to challenge the economic orthodoxy and suggest that labour markets are somehow different to other markets. Essentially, proposals of this view try to argue that demand curves for labour do not slope downwards and even that some slope upwards- it is possible for wages and labour demand to both rise! In Australia the attack has taken the form of a dismissal of Marginal Productivity Theory (MPT), the standard economics and various empirical observations showing simultaneous increases in minimum wages and employment (see, Hristodouli, Belchamber and Watson, 2004). The foundation for these ideas is the work of Card and Krueger (CK) (1995). Robson (2004) has provided a lively and convincing criticism of CK which I

will not attempt to repeat in detail here, and I will borrow heavily on his reasoned arguments.

CK argue that under monopsony power a small increase in the minimum wage will result in an increase in employment. The increase in wages effectively transforms the behaviour of low wage firms into that of high wage firms. Monopsony power is where an individual employer is able to exert control over the level of wages due to their market power. This situation can arise where there is a single employer of a certain type of labour, or where the employees are in an isolated area and only have the choice to work for a single employer, etc.

In the case of a pure monopsony, a firm can reduce its wages and only lose part of their workforce. This occurs because some portion of the workers are either unable or unwilling to leave. This is not the case in a perfectly competitive labour market where all employees would leave to maintain the higher wage. Firms will reduce wages, because even though they are losing workers, which reduces their output and hence revenue, they have also lowered their wage bill for their remaining workers, and have hence lowered their production costs. A firm will continue to lower wages until the reduction in revenue exceeds the reduction in costs.

Imposing a minimum wage can in theory, result in an increase in employment, under certain conditions. If a minimum wage is introduced it means that the firm will now have to pay higher wages for all the remaining employees, increasing the wage bill. This will result in the firm expanding employment, to increase production and hence revenue until the increase in revenue offsets the increase in costs.

The major problem for exponents of CK in Australia is to explain why employers of the lowest paid workers would have monopsony power, as there are numerous employers of the same class of labour, and there are limited barriers to entry. In a monopsony labour market you would expect to see few employers and numerous barriers to entry to new firms.

Also, if monopsony power existed, we should observe a fall in output prices as the minimum wage increases. This is because an increase in the wage will increase employment, which would expand production. For the firm to be able to sell this additional output it would have to decrease the price to encourage consumers who initially thought that the good was too expensive, to consume the extra output.

Even if there is monopsony power, minimum wage can only rise within a certain range before it starts having a negative effect on employment, assuming that it initially had a positive one. This will vary across industries making minimum wage a fairly useless tool for this problem.

In answer to the critics of MPT it is worth spelling out what exactly MPT is. First, MPT assumes that a firm's decisions about how much output to produce and how much labour to hire are made *simultaneously*. Firms hire extra labour when the value of the extra output produced is greater than the wage. Firms will only increase output if activities which were not previously profitable are made profitable. Second, MPT relies on one of the corner-stones of *all* economics, namely the Law of Diminishing Returns. This states that each extra worker employed produces less output than the

worker previously employed. Therefore, extra output and extra employment requires a fall in wages.

The empirical “evidence” used to discredit MPT is along the following lines- between 1994 and 2004 the minimum wage rose by 40 per cent while employment also rose, by 30 per cent. I will show that, far from refuting MPT this observation, when put in proper context, supports a traditional economic analysis of the minimum wage.

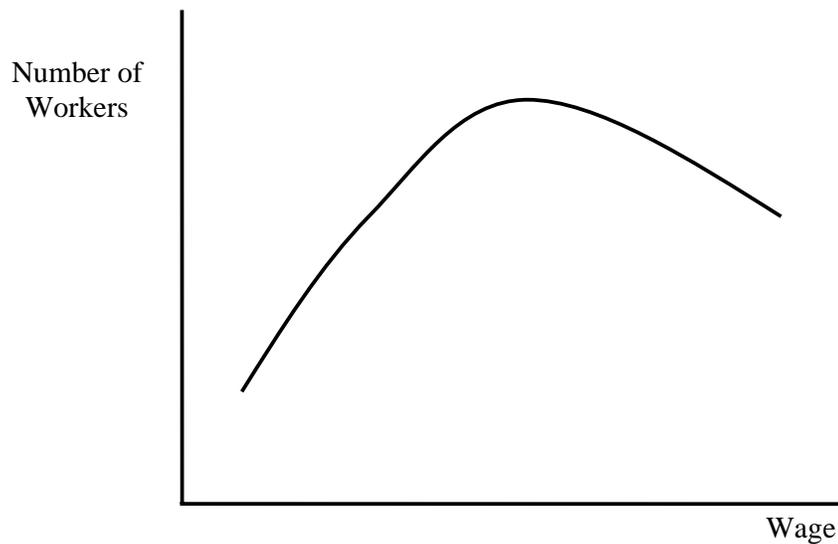
To get to grips with the effects of a minimum wage it is necessary to dig deeper into the operations of the labour market. In reality there is not a single labour market but rather very *many labour markets* each with their own supply and demand. An important characteristic of the multitude of labour markets is *substitutability*. Although it is common, particularly in the professions, to think of occupations being rigidly defined, in practice there is a great deal of substitutability between workers.

In an earlier paper (Lewis, 1997) I used the example of a hospital. Employment in a hospital will be determined by markets for specialists, doctors, nurses, clerks, cleaners etc., each with different amounts of required skills and characteristics resulting in different wages. Intuitively, tasks would seem to be quite segmented according to the degree of skill and specialisation of employees. However, at various times relatively junior doctors can perform duties of specialists, registered nurses often perform duties which would well be the domain of doctors, particularly in rural areas. TAFE-trained enrolled nurses can be substituted for university trained registered nurses and, increasingly, particularly in aged care, relatively unqualified ‘carers’ perform duties which were once the province of nurses.

Most empirical studies of individual labour markets point to the high degree of substitutability, with respect to demand, between types of labour. There is also strong evidence that, given the degree of substitutability, the demand for labour in these more narrowly defined labour markets is highly responsive to *relative* wages (Hamermesh, 1993; Lewis, 1985 and Daly, *et al.*, 1999). Also, generally, the lower skilled the worker then the more responsive is demand to relative wages. In addition to demand being highly responsive to relative wages research shows that labour supply is also responsive to relative wages (Kenyon and Wooden, 1996).

In the absence of legislated minimum wages the distribution of workers by wage would look similar to figure 5 below.

**Figure 5 The Distribution of Workers by Wage in a Free Market**

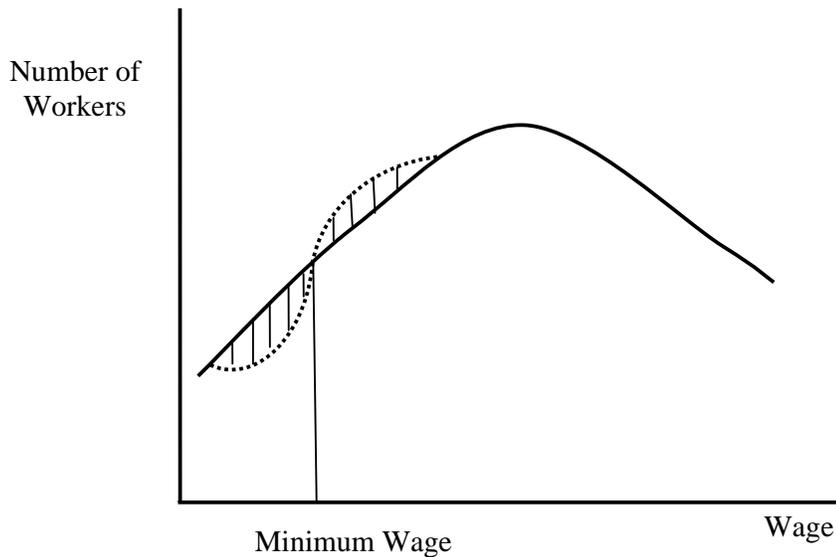


Lower skilled workers receive low wages and are at the left of the distribution. Higher skilled workers receive higher wages and are to the right of the lower paid. The majority of workers are located around the median.

Given the above framework it is relatively easy to understand the impact of minimum wages on employment and unemployment. The imposition of minimum wages affects only those in low skilled, low paid jobs. These individuals are, generally, very poor substitutes for the majority of the workforce and, therefore, minimum wages have little impact on the wages and employment of most workers. However, those workers earning just above the minimum wage are highly substitutable for those who would otherwise earn below the minimum. This is because although there is still a skill differential between them the jobs are still, relatively, unskilled.

After the imposition of a minimum wage the distribution of workers looks like that below.

**Figure 6 The Distribution of Workers by Wage After the Imposition of a Minimum Wage**



The dotted line shows the new distribution after the imposition of a minimum wage. If the minimum is completely binding no one is now employed below the minimum wage. However, there is likely to be some leakage as employers and workers find ways to enter into illegal employment relationships to circumvent the legislation. The lower shaded area represents the loss of employment of workers now priced out of the labour market and the upper shaded area represents the increase in employment of workers substituted for those displaced. The upper area is less than the lower area since the higher wage results in some substitution of capital for labour and reduced output with higher production costs.

Firms employ less of those who would have earned below the minimum wage and, therefore, unemployment among this group rises. However, these workers are substituted by more workers earning just above the minimum wage, which is one reason why minimum wages are supported by unions-employees in jobs are better off. The net effect on *total* employment may be difficult to detect. However, there is a large fall in employment of workers who could otherwise have earned below the minimum wage. Minimum wages are all about *distribution*. Jobs and income are redistributed away from the worst off.

In summary, the impact of the minimum wage on total employment may be proportionately small but the impact on low skilled, low paid workers is disproportionately high.

The impact of the minimum wage on employment depends on four effects- the *truncation effect*, *substitution effect*, *leakage effect* and the *output effect*.

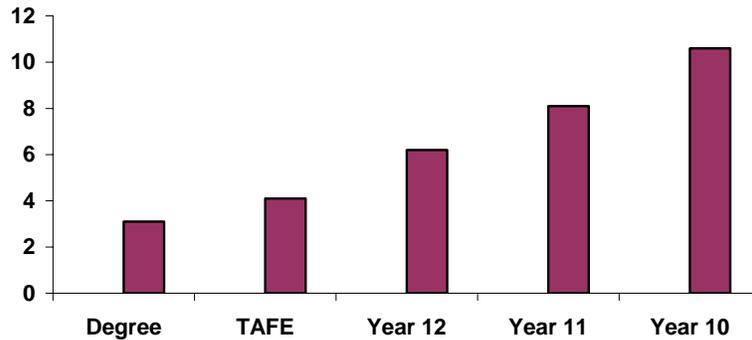
The truncation effect relates to the extent to which the imposition of the minimum cuts into the distribution of jobs. The larger the minimum wage relative to what the market wage would otherwise be the larger the truncation effect (the loss of jobs). The

estimates of excess supply earlier in the paper, between 533 thousand and 1.7 million suggests that the truncation effect is high.

Of course because Australia has long had a minimum wage we cannot tell what the market wage would be if there were no minimum. However, it can be deduced from the characteristics of the unemployed, particularly the long-term unemployed, namely that they are low skilled, that their market wage would be low.

There is not space here for a detailed analysis of the unemployed (see, Argy, 2005) but there is general agreement that the level of education is the single most important factor in determining who is at risk in the labour market. For instance, Figure 7 shows that for those whose highest level of education is Year 10 or less the unemployment rate is over 10 per cent. Clearly the unemployment rate is negatively related to level of education.

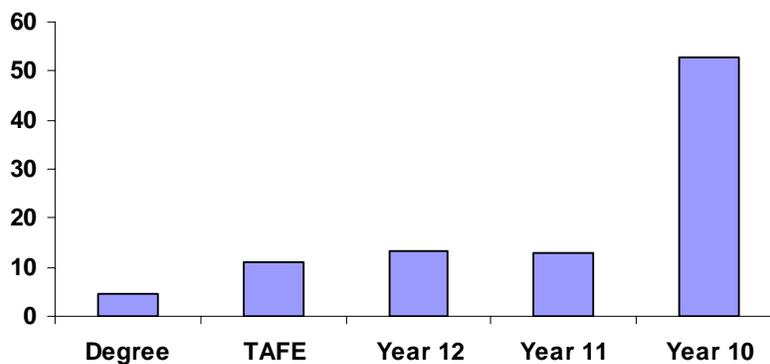
**Figure 7 Unemployment Rates by Highest Level of Educational Attainment, Per Cent**



Source: *Education and Work*, Australia, ABS, Cat No 6227.0

Another way of looking at this issue is to take the pool of unemployed. Of all the unemployed over 40 per cent have only attended school to year 10 or less.

**Figure 8 Percentage of Long Term Unemployed by Highest Level of Educational Attainment**



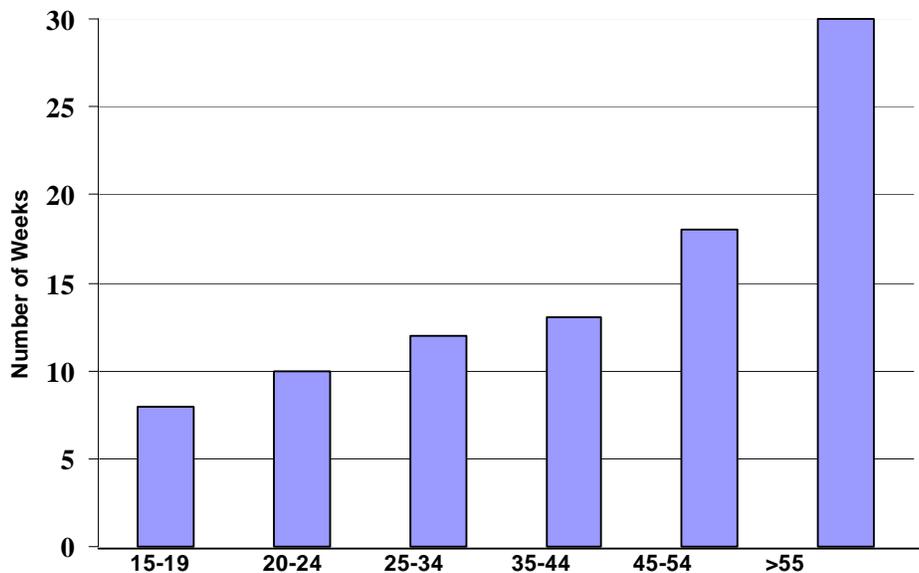
Source: *Job Search Experience of Unemployed People*, ABS, Cat. No. 6222.0

Far more important than the number unemployed is the proportion who are long-term unemployed, that is for more than one year. People in this group are clearly not part of the effective labour supply. Figure 8 shows the percentage of all long-term unemployed by highest educational achievement.

The effect of education on unemployment is even more marked for the most disadvantaged. About 55 per cent of the long-term unemployed have the lowest level of education.

Another important factor in determining those who are at risk in the labour market is age. Figure 9 below shows median duration of unemployment by age.

**Figure 9 Average Duration of Unemployment by Age, Weeks**



Source: *Australian Labour Market Statistics*, ABS Cat. No. 6105.0

Those in the 20 to 34 years old age group, have been, on average in unemployment for 10 weeks. Those 55 years old and older, have been, on average, unemployed for 30 weeks. It is important to note that it is not just age which is important. The older unemployed tend to be less well educated and more likely to be in jobs where skills demand is in decline.

In summary, the characteristics of the unemployed plus the magnitude of the number unemployed suggests that the substitution and truncation effects are very high. Therefore, the minimum wage is clearly well above the wage which would equate demand and supply. With regard to the leakage effect there is little evidence except casual empiricism that 'cash out of the till' payments are common for many employers of minimum wage labour such as cafés and restaurants. The high preponderance of students and overseas backpackers in these industries may also be some indication of the willingness of people to supply labour in these jobs. Finally the output effect depends on how large labour is as a proportion of total costs and how sensitive is consumer demand to increases in prices resulting from wage rises.

Minimum wage jobs are generally in labour intensive industries with high responsiveness to prices and therefore we would expect that the output is relatively large.

It is very difficult to estimate the impact of minimum wage changes on labour demand since there are factors operating in the whole economy. In particular the economy has been growing very strongly for 14 years and this would also increase demand in minimum wage jobs even with increasing minimum wages. I have attempted to measure the impact of minimum wage changes by controlling for the changes in labour demand and wages in the economy as a whole. Table 2 below shows the percentage changes in wages and employment in the minimum wage sector and the economy as a whole over the ten years 1994 to 2004. The minimum wage sector is that used in the ACTU submission to the safety net wage case, namely accommodation, cafes and restaurants, health and community services.

**Table 2 Changes in Minimum Wages, Average Weekly Earnings and Employment, 1994-2004, Per Cent**

	<i>Wages</i>	<i>Real Wages</i>	<i>Employment</i>
Minimum wage sector	40.2	7.7	29.9
Total all sectors	53.9	18.2	22.4
Difference	-13.7	-10.5	7.5
Implied elasticity	-0.55	-0.72	

Over the period wages rose by 40.2 per cent in the minimum wage sector or 7.7 per cent in real terms while employment rose by 29.9 per cent. In the economy as a whole wages rose by 53.9 per cent (18.2 per cent in real terms) and employment by 22.4 per cent. Looking at the differences between the growth rates in the two sectors, wages grew by 13.7 per cent less in the minimum wage sector while real wages grew by 10.5 per cent less. That is, minimum wage labour became *cheaper relative to labour generally*. Standard economic theory would predict an increase in demand for minimum wage labour relative to labour generally and this is precisely what we observe. Demand for minimum wage labour rose by 7.5 per cent more than for the economy as a whole. This evidence suggests elasticities of employment for the minimum wage sector of -0.55 and -0.72 with respect to wages and real wages, respectively.

On the basis of these elasticities if the minimum wage had been kept constant in real terms between 1994 and 2004 about 290 thousand extra jobs would have been created and if the minimum wage had been kept constant in nominal terms about 650 thousand extra jobs would have been created.

One of the major problems with the current system of setting awards is that there is no lobby group for the unemployed with most welfare groups arguing for higher wages. The focus of policy should be to raise the incomes of *low income households* rather than of *low wage workers*. There is substantial evidence that many low wage workers are in relatively high income households and that poor households are usually poor because members of the households are out of work. Thus, facilitating jobs growth should take preference over raising wages of those in work.

Unfortunately, the inflexibility resulting from awards is compounded by the social security system. Table 3 presents some interesting comparisons between the maximum social security benefits entitlements and the minimum wage.

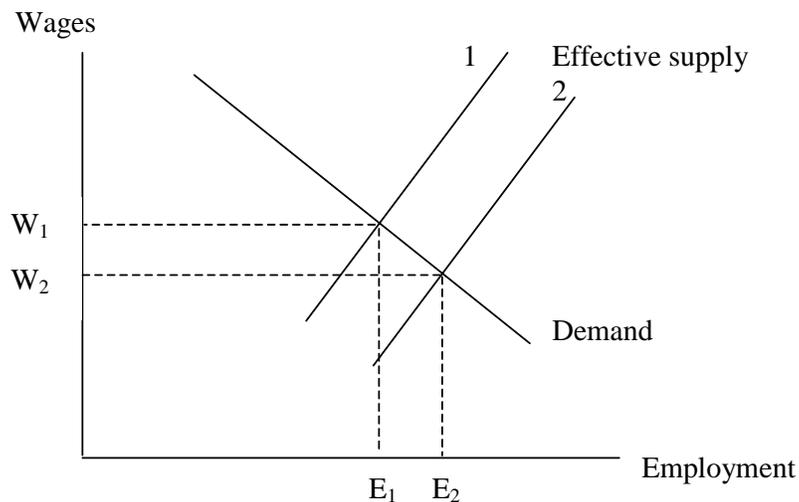
**Table 3 Social Security Payments and the Minimum Wage, March 2005, \$ Per Week**

Single Adult	242.30
with 1 child	394.92
pensioner	279.80
Couple	396.20
with 2 children	560.94
pensioner	432.70
Minimum Wage	467.40

Source: *Poverty Lines: Australia*, The Melbourne Institute of Applied Economics and Social Research

While these social security entitlements are only just above the poverty line they certainly compare favourably with the minimum wage. When income tax on wages and the other benefits and discounts available are included, the incentives to work are low or negative. Even with work tests and other disciplinary measures (mutual obligation) it is difficult to see the government depriving families with children by removing benefits from those unwilling to work. Clearly, changes to the demand side of the labour market, such as greater wage flexibility, must be accompanied by supply side policies such as major reform of the social security and tax systems

**Figure 10 Creating Jobs Through Labour Supply Policies**



Most unemployment is due to lack of 'effective supply' (see Lewis 2002). That is, given the current wage and institutional structures there are no jobs for which the unemployed are willing to work or profitable activities which employers can find for them to do. What is required is a raft of policies which increase effective supply. There is not space to adequately discuss these policies here but they would involve long run commitment to raising education participation and achievement among the most disadvantaged Australian. This is no small task involving considerable expenditure on education and social policy (Lewis 2002) plus widespread reform of social security, taxation and income support for low income households. However, supply side policies can only work if there are flexible wages.

This is illustrated in figure 10 above. Supply-side policies shift the effective supply curve to the right. People who were previously unemployable now enter employment as the real wage falls for people at the margin. However, new jobs can only be created if there is movement along the demand curve which requires downward flexibility in wages.

In summary, reducing unemployment is not easy and requires a whole range of labour market, welfare, social and education policies. However, part of any package of measures would be incompatible with the current policy of minimum wages.

## References

- Argy, F. (2005), 'An Analysis of Joblessness in Australia', *Economic Papers*, 24(1), 61-74.
- Brown, C., Gilroy, C., and Kohen, H. (1982), 'The Effect of the Minimum Wage on Employment and Unemployment', *Journal of Economic Literature*, 20, 487-528.
- Card, D. and Krueger, A.B. (1995), *Myth and Measurement: The New Economics of the Minimum Wage*, Princeton University Press, New Jersey.
- Daly, A, Nguyen-Hong, D., Eldridge, D. Gabbitas, O., McCalman, P. (1998), *Youth Wages and Employment*, Productivity Commission Staff Research Paper, Ausinfo, Canberra, October.
- Ehrenberg, R.G. (1995), 'Review Symposium on Myth and Measurement: The New Economics of the Minimum Wage', *Industrial and Labour Relations Review*, 48(4), 827-828.
- Hamermesh, D.S. (1993), *Labour Demand*, Princeton University Press, New Jersey.
- Kenyon, P. and Wooden, M. (1996), 'Labour Supply' in Norris, K. and Wooden, M. *The Changing Australian Labour Market*, AGPS, Canberra.
- Leigh, A. (2003), 'Employment Effects of Minimum Wages: Evidence from a Quasi-Experiment', *Australian Economic Review*, 36(4), 361-373.
- Lewis, P.E.T. (1985), 'Substitution Between Young and Adult Workers', *Australian Economic Papers*, 24(44), 115-126.
- Lewis, P.E.T. (1997), 'The Economics of the Minimum Wage', *Australian Economic Review*, 30(2), 204-7.
- Lewis, P.E.T., (2002), 'What Do We Know About Job Creation?', *Australian Journal of Labour Economics*, 5(2), 279-288.
- Lewis, P.E.T. (2004), 'The Australian Labour Market and Unemployment in 2004', paper presented to the H .R Nicholls Society, Melbourne,
- Lewis, P.E.T. and McDonald, G. (2002), 'The Elasticity of Demand for Labour in Australia', *Economic Record*, 78(240), 18-30.
- Lewis P.E.T. and Seltzer, A. (1996), 'Labour Demand' in Norris, W.K. and Wooden, M. *The Changing Australian Labour Market*, AGPS, Canberra.
- Osterman, P. (1995) 'Review Symposium on Myth and Measurement: The New Economics of the Minimum Wage', *Industrial and Labour Relations Review*, Vol. 48, No. 4, pp827-828.
- Robson, A. (2004), 'A Labour Market Fable', *Policy*, Vol 20, No4, pp25-30.
- Seltzer, A. (1997) 'An Evaluation of the International Evidence on the Employment Effects of Minimum Wage Legislation' *Australian Economic Review*, Vol 30, No 2, pp 208-214.