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Sue Richardson

DISCUSSION PAPER NO. 386

April 1998

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DISCUSSION PAPER NO. 386

April 1998

**ISSN: 0725 430X
ISBN: 0 7315 2250 8**

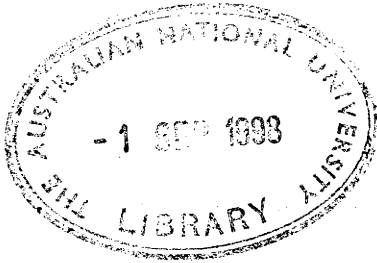
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****Paper presented to the Conference: Economics and Industrial Relations - Reappraising the Relationship, held in honour of Professor Joe Isaac, 4-5 December 1997, Canberra. Conference organised under the auspices of the Centre for Economic Policy Research, ANU, under the auspices of the Reshaping Australian Institutions Project ANU, and in conjunction with the Industrial Relations Research Centre, University of New South Wales.**

The Conference papers are forthcoming in a special issue of the *Journal of Industrial Relations*, December 1998.

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Summary

There have been rising levels of inequality in the earnings distribution in some OECD countries (principally the English-speaking ones) together with stubbornly higher levels of unemployment in many others. Australia has shared in the rise in earnings inequality, but not to the degree that the US, Canada and the UK have. It has also shared in the rise in persistent unemployment, but not to the degree that many continental European countries have. This situation provides the background as to why there is a current interest in the association between earning a low wage and living in a low income household. The rising inequality has led to renewed interest in the usefulness of legally binding minimum wages as an instrument to redress this. The high unemployment has led to a renewed interest in removing restrictions on what employers must pay, in the hope that this will increase employment and reduce unemployment.

This paper provides the first detailed examination of the low wage group in Australia and their standing in the distribution of household equivalent income.

It finds that low wage workers are very varied in their socio-economic characteristics. Most live in lower income households but some do not. A cut in low wages which focuses on those on around the AIRC minimum would be quite regressive. The circumstances necessary to make the gain to the unemployed exceed the losses to low wage workers who have a low income appear to be quite implausible. A large majority of the people whose wages would be cut already have below average incomes. A rise in low wages for those near the current minimum would be progressive in its impact on the distribution of income among those in the labour force. But whether either of these policies is a good idea cannot be determined by reference to the evidence in this paper alone.

Who Gets Minimum Wages?

Sue Richardson*

1. Introduction

Do people who receive low wages live in low income households? Are they struggling to maintain an acceptable standard of living for themselves and their families? Would a rise in the value of the minimum wage make the distribution of income among households more equal? It is taken for granted in much of the Australian public policy discussion that the answer to these questions is 'yes'. This presumption was clear, for example, in the position taken by the ACTU in the "Living Wage Case" decided by the Australian Industrial Relations Commission in 1997. There, the ACTU argued strongly that it was necessary to raise the wages of the lowest paid in order to ensure that workers had minimally adequate incomes. In this they were supported by the major welfare groups.

There are a number of reasons for being cautious about the presumption that low wages equate with low incomes. The major one is that many people live in multiple earner households: the household does not rely solely on the earnings of the low wage worker for its income. A second reason is that even a low wage will leave single people relatively well off, since they have to support only themselves on this income. There is strong evidence from the US, and some from the UK, that the benefits of an increase in their minimum wages go predominantly to workers who are not in households at the bottom of the income distribution.¹

The interest in whether people who receive low wages live in low income households centres chiefly on the fact that it is within the power of the State to set minimum wages. Do low wage workers have a strong claim that the coercive power of the State should be used on their behalf, to require employers to pay more than they otherwise would have to? The claim of low wage workers would be the stronger the more that it is found that they have low standards of living (by contemporary standards). It would be particularly strong if they were found to have standards of living that were below those of a significant number of social welfare beneficiaries. Social welfare beneficiaries have already been deemed to deserve the support of the State to raise their

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¹ See, for example, Bell and Wright, 1996; Browning, 1995; Burkhauser and A Finegan, 1989. Note that at present the UK does not have a minimum wage, Wage Councils having been abolished.

standard of living, in this case via its tax and transfer powers. The claim of low wage workers would be weaker the more that it is found that their standards of living are indistinguishable from those of others, especially of other workers. The claim of low wage workers would also be stronger if others are dependent on them for their standard of living. In that case, hardship from the low wage and standard of living of the wage earner is multiplied across her or his dependants.

We do not have an uncontentious measure of either low wages or of standard of living. No attempt will be made to establish a level of wages which is objectively low in terms of the standard of living which it makes possible. Nor will standard of living be measured in a sophisticated way. Rather, the focus of this paper is on developing our understanding of who receives low wages and the living circumstances of the low paid.

One of the key arguments against the use of enforced minimum wages to raise the living standards of low wage workers is that to override the outcomes of the market in this way causes unemployment.² In the end, the State cannot force employers to take on workers whom they judge to be worth less than the wage that must be paid. If the price of labour is fixed then it is the quantity and quality of workers employed that will adjust to equate wage and worth. To raise minimum wages will increase the incomes of low wage workers who have jobs, but it may do so at the expense of those who lose their jobs or who fail to obtain one. Thus, an argument has been made that enforced minimum wages are regressive (unemployed workers being worse off than low wage ones) and oppose the interests of the class of people who are likely to be distributed between low wage jobs and unemployment.

The above argument is contentious, chiefly because there is no agreement about how sensitive unemployment (or employment) is to the level of any enforced minimum. I do not intend to pursue it here. But any case to raise (or lower) minimum wages based on their relation with low household income would have to take a position on this debate.

Aside from any effect on employment, minimum wages can affect productivity. The productivity of workers is not exogenous. It is affected not only by their skills and attitudes to work, but also by the capital and technology they have to work with and the organisational skills of their employer. For many products and services, the available technology of production is not fixed. That is, the same, or similar, product can be produced using different combinations of skills, capital, technology and organisational skill. One variation may involve heavily supervised low skill workers using well-established technology. A second variation may involve higher skill labour using innovative technology. The unit labour cost might well be the same with both. The first variation is feasible only if low wages can be paid. A rise in the minimum wage may cause

² The term 'enforced minimum' is used because the mere enactment of a minimum wage is not sufficient for it to be effective. Employers must have a strong incentive to honour the minimum, even in the presence of workers who would accept a lower wage.

a firm to change strategy, from the low skill/low pay technique of production to the higher skill/higher pay technique. Because people can learn, this may not require any change in personnel, but rather a change in the way they are trained and employed on the job. Clearly, provided the skills are within the grasp of the existing workers, the higher skill/higher wage technique is socially preferred, since it implies a higher standard of living for the workers, probably more satisfying work and, by hypothesis, no change in unit labour costs. It will reduce the number of people employed to produce a given quantity of the product. This will be socially good or bad, depending on whether the macroeconomic environment is such that the released labour is re-employed elsewhere or left unemployed.³

The level of minimum wages has a number of other ramifications which will not be canvassed here. For example, there has been a long tradition in Australia that a person who works full-time should be able to earn enough to support herself/himself (and dependants). There are important dimensions of dignity and independence in being able to support oneself. And the Australian welfare system largely presumes that it is the non-employed rather than workers who need its assistance.

Thus the case for or against minimum wages (or higher or lower minimum wages) does not stand or fall on whether low wage workers reside in low income households. There may be other important effects of minimum wages which count in their favour or against them. But the impact on the distribution of household income is one important part of the minimum wage story, and the one which this paper will illuminate.

2. What do we mean by low wages and low income?

Low wages

What constitutes low pay is a matter of judgement. One source of such a judgement is the Australian Industrial Relations Commission. In 1997, the Commission fixed, for the first time since the abolition of the Basic Wage in 1967, a minimum rate of pay below which no adult on award rates could legally be paid. That rate was \$9.50 per hour, or \$359.40 for a 38 hour week. (AIRC, 1997).

The rate of pay which bears the same relation to average adult ordinary time earnings in 1990 as \$9.50 does in 1997 is \$7.30. The comparable figure for 1995 is \$8.85. The data on which this paper is based come from the Survey of Income and Housing Costs conducted by the ABS in 1989/90.

It is important to note here that 1989/90 was a time of relatively low unemployment (around 6 percent). Since then unemployment has risen. So too has inequality in the distribution of earnings among full-time male (but not

³ For a related discussion of how a local competitive equilibrium may not be the most efficient which is available, see the analysis of a low-skill, low-quality trap by Redding (1996).

female) employees (Borland,1996). It is relevant to this paper that most of the growing inequality among men arose from disproportionate gains for the top decile. Over this period, even for men, the bottom decile of full employed workers gained relative to the median. But at the same time there was a notable growth in the proportion of the workforce which is employed part-time or part-year. The changes in the circumstances of the labour market mean that it is necessary to be cautious in extending the conclusions based on 1989-90 data directly to the present. Just how the present is likely to differ from the past is not, however, at all clear.

There is a good case for confining our interest to people whose wage matched that awarded in the Living Wage case, and perhaps up to a dollar less. People who are paid much less are being paid below the minimum embodied in awards.⁴ They must therefore be employed in some award-free occupation, or alternatively are being paid illegally below the award. In either case, an increase in the minimum award rate is unlikely to afford them much assistance: they are largely beyond the protection of regulated wages, as these are currently enforced. Alternatively, these very low wages may simply reflect an error of measurement. The argument for not extending above the AIRC-defined level of low wage is that the selection of any greater value is arbitrary.

Despite these arguments, I do in fact encompass within the term 'low wage' a much broader range than the value of the AIRC minimum. The reason is partly practical. The data are derived from a sample of the Australian population, which contains about 33,000 people (over the age of 14) in 1989/90. Within this sample there are simply not enough who are paid at or near the equivalent of the AIRC minimum for any robust analysis. There were only 380 adult respondents who received a wage of between \$6 and \$7.30 and only 700 who received a wage of \$7.30 or less. A second reason is that it is interesting to enquire into whom regulation of wages *might* protect, as distinct from who is currently being protected. An extension of an enforced wage minimum to those who are currently being paid below the lowest award rate is one policy possibility. It is one which would probably require a considerable extension of resources for the industrial inspectorate.⁵ Finally, the elimination of surprising (ie, very low) observations on the grounds that they are perhaps caused by errors in the data is a dubious practice. It makes it rather unlikely that expectations will be disconfirmed by the data.

For these reasons, I define low wage to be any wage for an adult which in 1990 lay between \$1 and \$9.50 per hour. The comparable wage rate for juniors (under 21) is \$5. In 1990, 17 % of all wage and salary earners were receiving low wages, thus defined. It is important to note that this "low wage" is \$2.20

⁵ At present, enforcement of award rates of pay is largely left up to trade unions. This must be an increasingly difficult task for them (entirely funded out of members dues) at a time when membership is falling, individual or firm-specific wage arrangements are increasing and a rising portion of the workforce is being employed on a casual and part-time basis.

above the AIRC equivalent for adults and well above any claim that the ACTU has made for the value of the minimum wage.

The value of the hourly wage has to be inferred from information on hours usually worked in the respondent's main job and the usual weekly earnings received from that job. Any error of reporting in either hours or earnings will be reflected in the imputed hourly wage rate. In calculating the hourly wage, all people who reported working more than 40 hours per week were deemed to be working 40 hours. The reason for this is that the concern of this paper is the connection between low wages and low incomes. People who work a full week and receive middling level weekly earnings are at risk of being defined as low wage workers if they report working very long hours in their main job. The problem of long hours is real, but it is different from the problem of low wages and I wish to avoid confusing the two. Most of the people who report working very long hours are not being paid formal overtime (Wooden et al, 1994). Just why some employees are working long hours, and whether it is sustained over a sizeable period of time, is not known. In 1989/90, hours worked are reported in intervals, including 10 hour bands for the 1-9 and 10-19 hour groups. In the 1994/5 comparable survey hours are not grouped. From the latter survey it is thus possible to calculate the average hours worked by people in the bands reported in 1989/90. These averages are then imputed to each person in the relevant band in the earlier survey. Thus, for example, people who are reported as working 0-9 hours are given a figure of 5.8 hours worked. In addition, people who have an imputed wage of less than \$1 or report zero annual income unit income are deleted from the analysis.

\$9.50 is rather a high value for a discussion of a "minimum" wage. But it makes some sense in the Australian context where there are a whole set of minima, which extend well into the full range of wages. It is highly unlikely that a change in "the" minimum would leave other award minima unchanged. It has been the practice of the industrial tribunals, via national wage cases, to alter all awards in some proportion at the same time as any minimum is altered.

I examine the sensitivity of conclusions to the choice of low wage value, and find that they are indeed quite sensitive.

Table 1 gives a feel for the relative size of the groups which received low wages, in 1990.

If the standard set by the AIRC in 1997 were used as the definition of low pay, Table 1 shows that only 5 percent of adult wage earners and 2 percent of all adults would be described as low paid. From these figures alone it can be seen that the federal minimum wage cannot have a large impact on the overall distribution of income, even if all beneficiaries were to live in low income households.

Table 1

**Proportions of workers receiving different wage rates:1989/90
(workers earning \$1 per hour or more)**

	Hourly Wage		
	Adult wage earners: % receiving	All adults: % receiving	Under 21: % receiving \$5 or less
\$7.30 or less	5%	2%	
\$8.50 or less	10%	5%	15%
\$9.00 or less	13%	6%	
\$9.25 or less	16%	7%	
\$9.50 or less	18%	9%	
Average wage	\$14.13		\$8.12
Total number	5,454,008		641,583

Source: own calculations from the Survey of Income and Housing Costs, 1989/90, ABS

Note that the numbers reported in this table and elsewhere have been magnified, using weights supplied by the ABS, to show the estimate of the total Australian population in each category.

As can also be seen from the table, the wage distribution is quite dense around the \$9 mark. Five percent of adult wage earners received between \$9.00 and \$9.50 per hour--the same as receive \$7.50 or less. Since the choice of a low wage figure is arbitrary, this reinforces the need to explore the sensitivity of conclusions to the choice which is made.

About 15 percent of young people (aged under 21) received the low wage chosen for them in this paper. These represent fewer than 1.5 percent of all wage earners. The story that will be told below is thus dominated by the experience of adults.

Table 2 describes some of the key socio-demographic features of the low wage group.

In almost all respects, the workers earning \$8.50-\$9.50 an hour look more like the general workforce than do the lower paid workers. The lower the wage, the more distinctive the low wage group becomes. Low wage workers are more likely to be female, part-time, aged 21-24, with low education, to be a married woman (and less likely to be a married man) and to be a non-student child

living at home than are wage earners in general. They are very similar overall in age, marital status and other dimensions of family status. But in most respects the differences are quite small. Low wage workers are only a little more likely to be single than all earners: indeed, for those earning \$8.50-9.50 there is no difference in marital status. There is also no difference between low wage workers and all wage earners in the proportion who are aged 35-64 (half, in both cases).

Table 2

Characteristics of all workers and of low wage workers				
		All wage earners	Wage less than \$8.50/5	Adults with wage between \$8.50-9.50
Sex	Female	43	66	60
	Male	57	34	40
Age	15-20	8	7	na
	21-24	12	18	21
	25-34	29	21	28
	35-54	43	43	41
	55-64	7	8	9
	LF status	full-time	79	57
	part-time	21	43	26
Marital status	married	66	61	66
	divorced	7	8	8
	never married	27	31	27
Highest Educ	less than yr 12	33	49	51
	year 12	15	17	16
	trade certificate	15	8	10
	other certificate	23	21	19
	degree or higher	13	5	3
Family type	husband+depkids	24	8	14
	wife+depkids	16	27	23
	husband no depkids	14	8	12
	wife no depkids	12	17	17
	lone parent	2	4	4
	student child at home	1	2	na
	other child at home	13	18	14
	unrelated group	8	6	8
	live alone	7	6	6
	Total number	5,769,421	545,914	463,568

Source: Own calculations from the 1989/90 Survey of Income and Housing Costs, ABS⁶

⁶ Note that the 1989/90 survey did not ask labour force questions of children who were full-time school students. Thus this group is not represented in the data.

Looked at another way, low wage workers are most likely to be female, full-time, of prime working age, married, and with little education. About one third have dependent children. Note that while single parents are more likely to be low wage earners than average, they still represent only a small percent (4%) of the total.

The view that most low wage workers are young and single and living in a group house or at home does not receive much support. While about one third are single and one quarter are aged under 25 and/or living at home or in a group house, these proportions are not very different from the wage-earning population at large. Full-time student children constitute only a very small proportion of all low wage workers, even on the tighter definition of low wage. (Recall that full-time *school* students are excluded from the data).

An examination of the data disaggregated by sex (not reported here) shows that women low wage workers are predominantly prime age and married. Half work full-time and almost half have dependent children--including the 6 percent who are lone mothers. Only 13 percent are daughters living at home.

Male low wage workers have a somewhat different profile. A higher proportion are under the age of 24 (30 percent) and are never married (41 percent). Nearly all work full-time and 30 percent have dependent children. One quarter live at home with their parents. Note that because there are almost twice as many low wage women as men, similar absolute numbers of young men and women live at home with their parents, although the proportions are very different.

Low income

It is even more contentious to settle on a definition of low income than to decide what constitutes low pay.

The well-known difficulties of choosing an income unit, time period, measure of income and equivalence scale will not be rehearsed here. I simply report that income is defined as the money income received by the income unit⁷, from which personal income tax liability has been deducted. This income is then adjusted by the OECD equivalence scale, which weights an individual as needing 0.59 of the income of a couple to achieve the same standard of living. Extra family members are assumed to increase the needs of the household by a factor of 0.29 per person (regardless of age). This equivalence scale is chosen partly because it is simple, hence intelligible, and partly because it facilitates international comparison. The final measure of income used in this paper is thus equivalent, after tax money income for the income unit. This value is then attributed to each person in the income unit who is aged 15 or over (ie, of potential workforce age).

⁷ An income unit comprises a single adult or couple and any dependent children. Dependent children are those who are full-time students up to age 20 or are aged 15 or under. For ease of exposition, I use the terms income unit and household synonymously, even though the formal meaning of 'household' is rather different.

There are a variety of ways in which the distribution of income could be expressed. First, income is reported both for the "current week" and for the preceding year. It is an indicator of the volatility of people's earning status that these two measures produce rather different distributions. Second, the distribution of income may embrace all income units, or only those which are in the labour force, or only those which have a wage earner. Third, the distribution may be among income units, unweighted by the number of people which they contain. Alternatively, the weight given to each income unit may equal the total number of people, including children, in that unit. Or the weight may equal the number of people over age 15--ie, those potentially working.

The choice among these distributions is largely arbitrary. It can, however, affect the story told. It is tedious and confusing to repeat the analysis for every one of the various plausible distributions. The strategy adopted here is to choose one of the distributions as the principal one on which the analysis is based. From time to time, alternative distributions will be discussed. And the sensitivity of conclusions to the choice of distribution will be monitored, but reported only when it is large enough to affect the story.

The distribution on which we will concentrate is annual equivalent income unit income, net of tax, as distributed among those aged 15 and over. It will cover two populations. One is all people over age 14. The other is those in the labour force.

It is important to understand the many ways in which the hourly wage of the worker differs from the equivalent after-tax income of the household (income unit) in which they reside.

The income unit may have income from a number of sources. These include other wage earners, self-employment, income from assets and government benefits. From this income is subtracted personal income tax. The income in question is for the previous year whereas wages are calculated for the survey week. They may have been different at other times during the year. Systematically, the correlation between low wages and low equivalent income is higher when weekly income unit income is used rather than annual income. The hourly wage is only one dimension of the person's earned weekly income. The other important dimension is the number of hours of employment. The equivalence scale also plays a major role in affecting the location of a person within the equivalent income distribution. A single person who received \$8.50 per hour for a full-time full-year job would be in the 6th decile of the distribution of equivalent income among all households and in the 5th decile of its distribution among those in the labour force. That same wage would put a couple with two children in the first decile of both distributions. This is a sharp reminder of the difficulty which has confronted wage-setting tribunals since the days of the Harvester Judgement: how many people should a low wage be able to support "in frugal comfort" ? A wage which barely supports a family of five is generous for a single person.

Most of the discussion will centre around the link between low hourly wages in current job and low annual (equivalent, after tax) income unit income. Weekly incomes fluctuate more than annual incomes do, principally with changes in employment status and hours worked. It is judged that annual incomes give a better picture of the standard of living than do weekly incomes.

The US literature concludes that low wage workers are not predominantly to be found in poor households. (Bell and Wright, 1996; Burkhauser and Finegan; Burkhauser and Finegan, 1993; Mincy, 1990). For Australia it is clear that this conclusion must also be true, at least in part, even before we look at the data in any detail. The reason is that the poorest households mostly do not contain a wage earner. It is possible that some households with a wage earner are no better off than households without. This could be the case if hours worked or wages (or both) were very low. But for Australia as it has been, households which have had a reasonable number of hours of employment have earned enough to keep them from the bottom of the earnings distribution. In such an environment it is clear that the poorest households will not be the ones to benefit from a rise in minimum wages. For a rise in minimum wages to be of particular benefit to the lowest income households, two conditions are necessary. The first is that such households contain wage earners who work more than a handful of hours. The second is that these employees earn low wages. We know already that the lowest income households mostly do not contain wage earners. Many of them are aged singles and couples, and sole parents. In much of the analysis of the link between low wages and low income we therefore use the distribution of income among people in the labour force. About 30 percent of the sample were not in the labour force and it is this group which has been excluded from this distribution. Note that people in the labour force are not necessarily earning a wage. Forty six percent of the sample were employees, about 11 percent were self employed and 6 percent were unemployed. Most of the remainder were not in the labour force.

3. The big picture

We begin with a helicopter view of where in the distribution of income low wage earners are to be found.

Figure 1 shows the percentage of low wage workers to be found in each of the deciles of the income distribution. Several distributions are shown. In panel a), low wage workers are defined as those with a wage of no more than \$9.50 if an adult or \$5 if under 21. The graph shows where they are located in the distribution of income both among all income units and among income units which are in the labour force. Panel b) shows the same relations when low wage is defined as \$8.50/5 or less and \$7.30/5 or less.

As expected, low wage earners are concentrated less densely at the bottom of the distribution of all income units than they are when the distribution includes only those in the labour force. The twentieth percentile for each of the two

Figure 1(a)

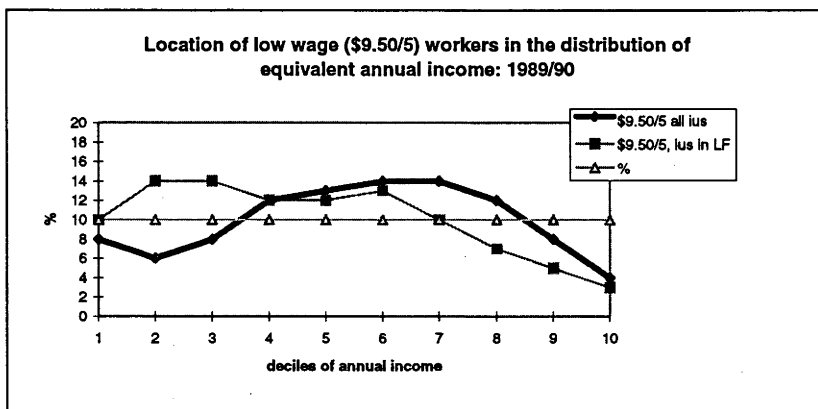
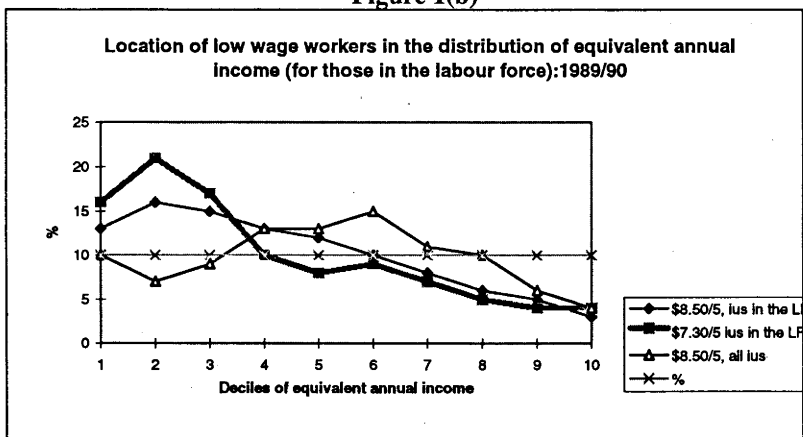


Figure 1(b)



Source: own calculations from the Survey of Income and Housing Costs, 1989/90, ABS

distributions is \$12,896 and \$15,472 respectively. The distribution of those who meet the more stringent definition of low wage (no more than \$8.50 for adults) is also more concentrated at the bottom end than is the case for the more generous definition.

The location of \$9.50 low wage workers in the distribution of income among all households suggests that they are predominantly found in the middle deciles (deciles 4 to 8). An increase in their wage which was fully passed on into across the board price rises would be like a slightly regressive tax. It would benefit those in the middle of the income distribution the most.

By contrast, if we take \$8.50 low wage workers and examine their location within the distribution of income among people in the labour force, then low wage workers are predominantly found in the bottom half of the income distribution. Twenty nine percent are found in the bottom two deciles and 69 percent are found in the bottom half of the income distribution.

Figure 1(b) also shows the picture for workers who were on a wage of \$7.30 per hour or less. \$7.30 is the 1989/90 equivalent of the minimum wage set by the AIRC in 1997. It covers fewer than 5 percent of adult wage earners (some in this category being juniors earning \$5 or less). Yet they are a particularly disadvantaged lot, with half of them being located in the bottom 3 deciles of the income distribution and 72 percent in the bottom half. The evidence strongly suggests that the lower the wage, the more densely are wage earners clustered at the bottom of the income distribution.

For those on wages near the AIRC minimum and even \$1 more, a wage rise analogous to that described above would be clearly progressive in its impact on those in the labour force.

Figure 2 disaggregates the distributions by sex. Figure 2(a) is for the distribution calculated only for those in the labour force. Figure 2(b) is for the distribution calculated to include all people aged 15 or over.

On both distributions the low wage men are more highly concentrated at the bottom than are the women. The percentages of women and men located in the bottom two deciles of the distribution in Figure 2a are 21% and 27% respectively. The comparable figures for the bottom half are 59% and 67%. These figures are higher than for the distributions in Figure 2b. Again the answer to the question of whether low wage workers live in low income households depends on how you look at it. With the more generous definition of low wage, low wage women are not particularly to be found in the bottom deciles of the distribution among all households. They are very much in the middle--neither high nor low. With the tougher definition of low wage and a focus on those in the labour force, low wage men are distinctly over-represented in the lowest deciles, with over half of them to be found in the bottom three deciles of the income distribution and only 9 percent to be found in the top third of the distribution.

Figure 2(a)

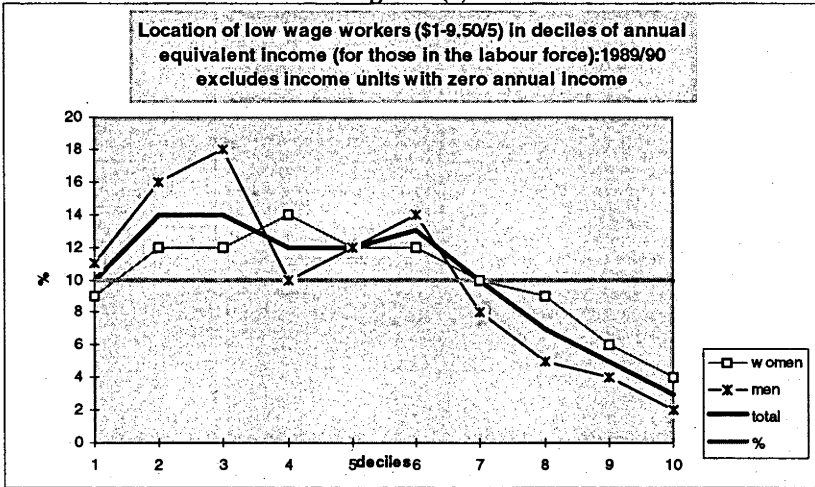
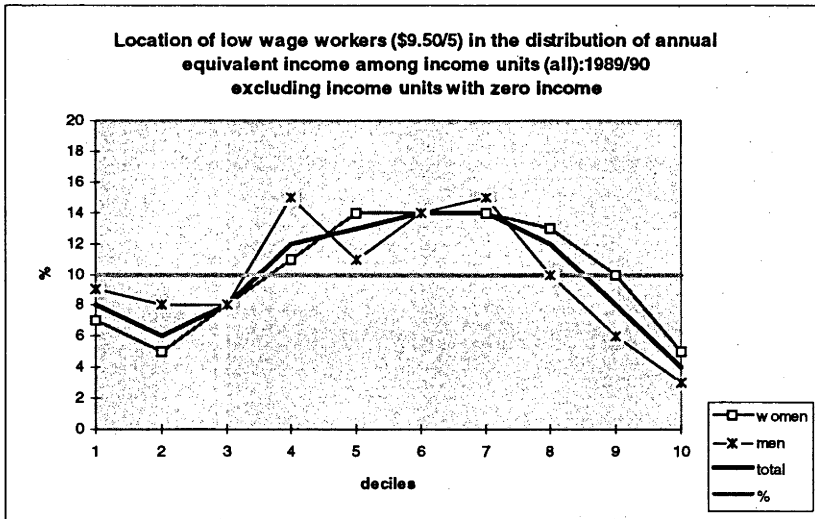


Figure 2(b)



Source: own calculations from the Survey of Income and Housing Costs, 1989/90, ABS

4. Are low wage workers needy?

One image of low wage workers is that they are secondary or tertiary income earners in the household who earn a bit of pocket money while concentrating their energies on other activities, such as education or domestic work. A contrasting image is that they are struggling breadwinners trying to support a family.

Table 2 showed something of who the low wage workers are.

The low wage workers for whom we may have a particular concern include those with dependent children, those of prime working age (25-55) and those who work sufficient hours to be considered major contributors to the household income.

Those for whom we may have less concern include people under the age of 25, young people who live at home with their parents, people who work only a small number of hours and single people (since even a low wage can provide them with an equivalent income which lies in the middle of the income distribution).

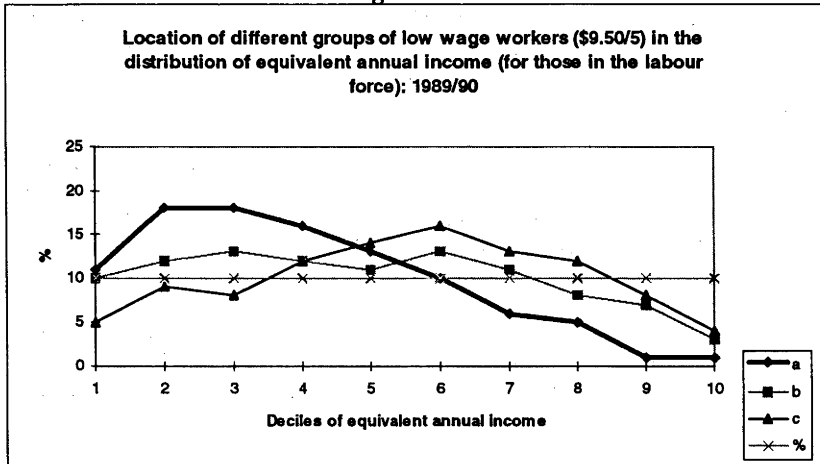
How is the low wage workforce divided up between these categories and how are the two groups distributed across the income distribution?

Figure 3 shows the position in the income distribution of three groups of low wage workers.

Group (a) has been selected to contain only people whose low wages are likely to be judged as problematic by most observers. It is likely to exclude a number of people whose low wages cause hardship. The people in Group (a) all have dependent children, are aged 25-55 and work 20 hours per week or more. They comprise 30 percent of all low wage workers. As Figure 3 shows, they are disproportionately found in the lowest deciles of the distribution of annual equivalent income (for those in the labour force). Almost half are in the lowest three deciles of the income distribution and 76 percent are in the bottom half. Eight percent (or 25,000) are sole parents and two thirds are women.

A question raised in the introduction was whether low wage earners had annual incomes below those of social welfare recipients. Social welfare who rely on social welfare payment for 90 percent or more of their income overwhelmingly have incomes below the third decile cut-off in Figure 3. But they are evenly spread between incomes that would place them in the first and in the second decile. Thus any wage earner who has an annual household income in the first decile is poorer than about half of these social welfare beneficiaries. This describes 10 percent of Group (a). Twenty eight percent of Group (a) have incomes which are no more than most welfare beneficiaries.

Figure 3



- a) those aged 25-55 with dependent children who work more than 20 hours per week*
- b) those aged under 25 or who have no dependent children or who work fewer than 25 hours per week or who are single and not a sole parent*
- c) those who have no dependent children and are either single or work fewer than 25 hours per week*

Group (b) comprises all the low wage workers who are not in Group (a). That is, it includes all people who are aged under 25 or who have no dependent children or who work fewer than 25 hours or who are single but not a sole parent. They comprise 70 percent of low wage workers, and are more evenly distributed across the income distribution. There is some concentration in the lower deciles, chiefly because they are strongly under-represented in the upper three deciles (as is true for all low wage workers). Thirty five percent are in the bottom three deciles and 58 percent are in the bottom half of the distribution. A rise in wages for this group would not be strongly equalising of the income distribution, but it would still be slightly progressive.

Group (c) has been selected to include those whose low income is least likely to be judged as problematic. It comprises people who have no dependent children and who are either single or work fewer than 25 hours per week. As was shown earlier, single people who receive even a low wage (as currently defined) have a middling level of equivalent income, provided they work full-time. The numbers in this group are about the same as in Group (a). They are found predominantly in the middle deciles (deciles 4-8) of the income distribution. An increase in wages for this group, other things equal, would

have little overall effect on inequality of annual equivalent income, but would benefit the middle at the expense of the bottom and top.

If low wage is redefined as below \$8.50 for adults, then the character of Group (c) changes substantially. The group is reduced in size by 45 percent. Those who remain are now as heavily concentrated in the bottom of the income distribution as are Group (a). Half are in the bottom three deciles and 74 percent are in the bottom half of the income distribution. So a cut in wages below \$8.50 for this apparently unproblematic group would be quite regressive in its effects on the distribution of household income. This change in the shape of the location of low wage workers across the income distribution does not occur for Group (a), when wages are set at \$8.50 rather than \$9.50, though the total numbers in that group are halved.

The discussion so far implicitly assumes that wages matter only as an income and are perfectly substitutable with any other source of income. In addition, we have implicitly assumed that who receives the income within the household is of no importance. Neither of these assumptions is correct.

Being able to *earn* one's own income is a mark of being able to function as a competent and independent adult (not the only mark of course: many women and a few men exercise their competence in the domestic sphere). It would be a sad development in Australian society if a person working full-time were not thereby able to support herself/himself independently and at an adequate standard of living. In this context, it is notable that even in 1989/90 there was a relatively high concentration at the bottom end of the income distribution among low wage workers who had dependents and who worked a substantial number of hours. We are not here talking about a fanciful problem.

Quite a large number of low wage workers are young people (up to age 24) who are not students and who live at home with one or more parent. The way in which information has been presented in this section makes this group look largely unproblematic. But the young people and their parents are unlikely to agree with this view. In the transition to adulthood, young people need to be able to leave home. As part of this, they need to be able to earn enough to support themselves in independent accommodation. We are still in the century where overwhelmingly young people left school at age 13 and took full-time jobs. As teenagers they became part of the adult community even if many continued to live with their parents. At the end of the century childhood has been extended to the late teens and even early 20s, if childhood is viewed as being not yet adequately educated to be a productive member of the workforce, and being required by economic dependency to live at home.

Many low wage workers are married women (often with dependent children). Their earnings have a value beyond their contribution to household income (though typically this is quite large, at 30 percent or more). They provide the woman with some capacity for independence, even if she chooses not to exercise it. With that capacity for independence goes, typically, greater equality

in relationships within the household. An adequate independent income for each of the adults in the household is an important aid to equality of dignity and respect.

The disaggregation which underlies Figure 3 shows that the link between low wage and low household income is not a simple or tidy one. The average relation conceals substantial variety among low wage earners. For a sizeable and important group--adults with dependent children--low wage and low family income are closely linked. Even for the the young and/or single, this link is strong if the more stringent measure of low wage is used. Many in both groups have incomes which are no higher than the incomes of people who rely on social welfare payments. The link is weakest for single adults who have no dependents or work only a few hours, and who have a relatively 'generous' low wage of \$8.50-\$9.50 per hour.

5 The role of low wages in supporting household income

The claims of low wage workers to need protection of their wages are greater if they contribute a substantial proportion to household income. One way to explore whether they do is to calculate the annual income earned by the low wage worker and express it as a fraction of the total annual income of the household to which she or he belongs. In both cases, income is gross of tax.

Figure 4 shows the relation between the low wage workers' share in generating income for the household, and the deciles of annual equivalent net income unit income (calculated for those in the labour force) in which they are located. The picture for all low wage workers is supplemented by an examination of this relationship for sub-sets of the low wage population.

Figure 4(a)

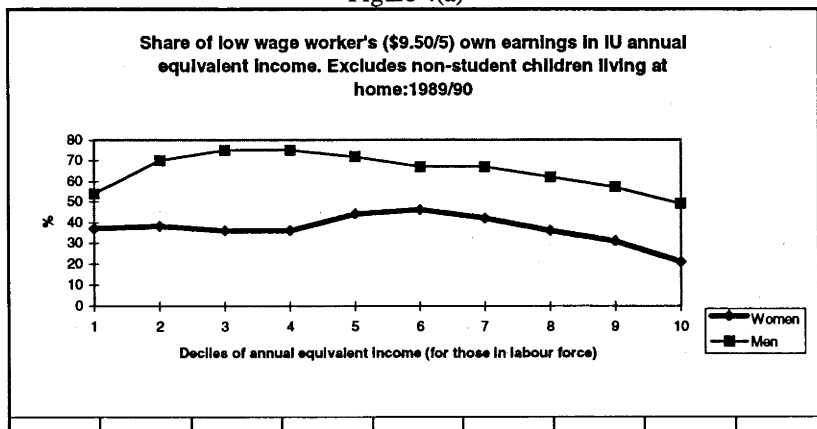


Figure 4(b)

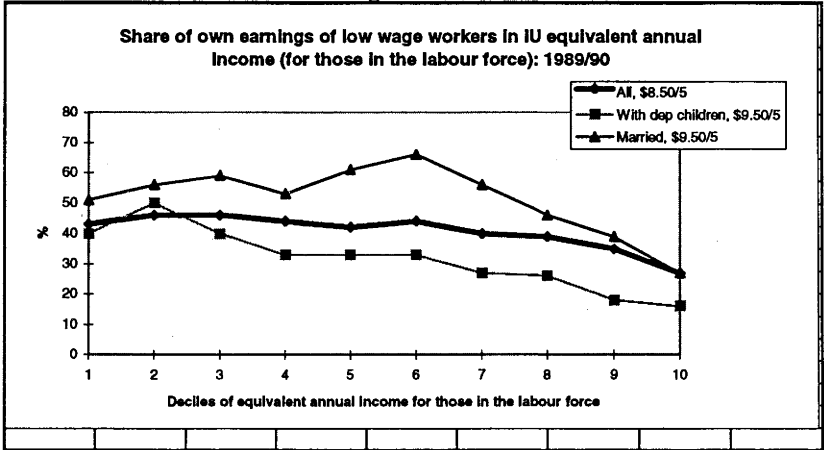


Figure 4(a) separates men and women. In both cases daughters and sons who live at home but are not students (hence who are defined as separate income units) are excluded.

The figure shows that low wage men contribute a high proportion of the income of the household in which they live, and higher than do women, at all deciles of the income distribution. One reason for this difference is that low wage men are rather more likely to be single than are women. At all levels of the income distribution, low wage men contribute more than half of the income of their household. Not surprisingly, the lowest shares are to be found for low wage workers who live in relatively high income households. It should be noted here that the absolute number of people in the sample who are found in some of the cells from which Figure 4 is derived are rather small--as few as 20, especially at the upper end of the income distribution. The standard errors in these cases are high, and mean that Figure 4 should be seen as indicative of the circumstances of all low wage workers rather than as a precise representation. In almost all cases, the share of low wage workers' incomes in the weekly equivalent income of the household is higher than is their share in annual income. This is particularly true of the lower income deciles.

Women low wage workers contribute around 40 percent of the income of their household. It is clear from Figure 4 (a) that the earnings of low wage workers are an important source of income for the households of which they are members. This is true of low income households as well as for those in the middle of the income distribution, which may be assumed to encompass many of the single low wage earners.

Figure 4 (b) shows the contribution to household income of different sub-sets of low wage earners. One group comprises those who earn the more parsimonious \$8.50/5 or less. The second group comprises low wage (\$9.50/5) workers who have dependent children. The third group is confined to those who are married. The last two groups exclude single person income units, for whom share is necessarily high.

In all cases the earnings of the low wage workers contribute a substantial amount to household income--no less than one third, except for the top 4 income deciles. The contribution is especially substantial for those who are married. It is important for low wage earners who have children, particularly for those in low income households.

On the evidence of Figure 4, low wage workers cannot be dismissed as contributing just pocket money to their household. This is true even when single people are excluded and is true for the important group of households with dependent children.

6. The link between low income and low wages: another view

Further insights into whether there is a tight link between having a low wage and having a low income can come from a direct comparison of the proportion of low wage workers who have low incomes and the proportion of low income workers who have low wages.

In order to examine this question it is necessary to identify a level of income which is deemed to be low. There is no objective standard for this, which is one reason why the evidence presented so far has been expressed in terms of the location of low wage workers across the deciles of the income distribution. The reader can judge for herself the point in the income distribution below which a person is deemed to have a low income (knowing that there is no discontinuity in living standard, income or anything else that matters, at whatever point is chosen: those who are slightly above the chosen point look very like those who are slightly below it).

The point chosen to represent a low level of (equivalent annual after tax income unit) income is the commonly used 'half the median'. The income distribution for which half the median is calculated is for those income units which have a person in the labour force and which reported positive income in the survey year. Recall that this includes the self-employed and the unemployed, as well as wage earners.

Half the median for this group is \$12,723 and 12 percent of income units in the labour force have this income or less. Note that this is somewhat more than the figure for all income units, of \$10,104.

The low wage group is all adults who earned \$9.50 an hour or less and all young people who earned \$5 an hour or less (the standard measure in this paper).

Table 3 shows a range of information about the link between low income and low wage, for several groups of wage earners.

Table 3 needs some help in interpretation. The first row refers to all people over the age of 14, not just those in the labour force. It says that 6 percent of all people who have a low income also have a low wage. And 14 percent of the people who earn a low wage also live in a low income household. Nineteen percent of all people (aged over 14) have incomes below the threshold and there are 2.4 million of them. For wage earners in total and for the various sub-groups, about one third who have low incomes, as defined, also have low wages. The exception is youth, where only 18 percent who have a low income also have a low wage.

The proportion of all low wage earners who have equivalent income unit incomes below half the median is only 14 percent. This figure is substantially higher, at 19 percent, for those with dependent children. It is lowest, among the sub-groups represented in the table, for people who are married. In total there are about 80,000 low wage workers with dependent children who also have low incomes. This compares with about 130,000 unemployed people who have dependent children and incomes below the threshold.

Table 3				
The link between low wages and low income: 1989/90				
low wage is \$9.50/5 per hour or less				
low income is half the median annual equivalent after tax income unit income for				
those in the labour force				
	Proportion of :			
	Low income people who have low wage	Low wage earners who have a low income	total % with low income	total number with low income
Persons over age 14	6	14	19	2,373,313
Wage earners	36	14	7	385,600
Wage earners with dependent children	36	19	9	218,762
Wage earners with dep children who work 20+ hours	34	17	8	160,860
Married wage earners	36	10	5	178,555
Wage earners under 21	18	34	16	75,591

source: own calculations from the unit record disk of the 1989/90 Survey of Income and Housing Costs, ABS.

The results, of course, depend on the cut-off levels chosen for low wage and low income. For example, if \$1,000 is added to the cut-off value for low income, the proportion of low wage earners with dependent children who also have a low income goes up by 5 percentage points to 24 percent.

The conclusions that can be drawn from Table 3 are that a rise in the level of low wages would have only a small effect on the proportion of people who have low incomes, since only 6 percent of them at most would benefit. However it would have a much larger impact on the subset of low income households which contain a low wage worker. About one third of the low wage workers who would benefit were in low income households. The other two-thirds, of course, were above the low income threshold and they would benefit also. Thus a rise in wage for the low paid would be of assistance to low income wage-earning households, but is not a very tightly targeted form of assistance.

7. The unemployed

The unemployed are probably among the most disadvantaged groups in society. The equity case for cutting low wages is that this is expected by its proponents to assist this group by reducing unemployment. Further, it would improve overall equity because the low wage workers, who would be harmed by this strategy, are believed to be better off than the unemployed. (Note that it would be even more equitable, on this scenario, if those who lost were high wage workers rather than low wage workers).

The data with which we are working enable us to examine how the unemployed are placed in the distribution of (equivalent, annual, after tax) income for those in the labour force, and to compare this directly with the circumstances of low wage workers. Although we already know that unemployed people generally are disadvantaged (see Saunders, 1992; Miller, 1997; Sheehan and Gregory, forthcoming), it is useful to examine their circumstances on a basis which enables them to be directly compared with low wage workers.

Figure 5 shows the location of unemployed workers in the distribution of income. Note that the unemployed are without a job at the time of interview, but the income measure is for the whole of the previous year. In the sample, there are about (weighted) 600,000 unemployed people as compared to about 1 million low wage workers (as defined). It is strikingly clear that the unemployed are indeed concentrated in low income households. In Figure 5(a), 62 percent are in the bottom two deciles of the distribution of income among households which are in the labour force, and 88 percent are in the bottom half. The distribution for men and women is indistinguishable, in contrast to the gender difference among low wage workers.

Figure 5 (b) illustrates the location of selected sub-sets of the unemployed. Again the picture is remarkably uniform, with a heavy concentration of unemployed workers in the bottom of the income distribution, in all three of the

sub-groups which have been shown. The groups are all those over age 21, those with dependent children, and those who are married. The highest concentration of unemployed workers in the bottom two deciles is found among those with dependent children (by a small margin, at 62 percent), followed by those who are over age 21 and then by married people. The modest effect of marital status on the location of unemployed people in the income distribution supports the conclusion (Miller, 1997) that where one partner is unemployed the other partner is likely either to be unemployed also or not in the labour force. Figure 5 provides strong conformation that unemployed people are heavily concentrated among the members of the labour force who have the lowest standards of living (as measured by equivalent annual net income).

There is no doubt that unemployed people are strongly concentrated at the bottom of the (labour force) income distribution. This is not surprising, and indeed it may even be necessary in order to retain a strong financial incentive to work.⁸ A redistribution from low wage workers to the unemployed would, on average, make the distribution of income a little more equal.

But to say this is a long way from concluding that low wages should be cut in the interests of a more equal distribution of income or even in the interests of a more equal distribution of work.

While a sizeable number of low wage workers are not in the poorest households, many of them are. Of those who earn \$7.30/5 or less--which probably is the group most at risk from a wage cut--over half are in the bottom 3 deciles of the (labour force) income distribution. There clearly are many groups who have a greater capacity to forgo income in the interests of the unemployed than do the low paid. You will always get a more equal distribution of income if you tax those who are just off the bottom and give the revenue to those who are below them. But such a redistributive policy has little to commend it if it leaves the incomes of those further up the income distribution untouched. It is the most regressive way of being progressive.

Of course, the argument that low wages should be cut in order to generate jobs for the unemployed is not based on the view that the low paid are the most appropriate group, in a distributional sense, to pay the costs of more jobs. The argument is that the low paid are the only group whose pay level is relevant to the job prospects of the unemployed. If cutting the pay of the middle and high pay earners was expected to be equally effective in generating jobs then presumably this would be preferred.⁹ In principle we ought to *know* whether cutting the pay of the low

⁸ Although it is not surprising, it is not inevitable. Unemployed people may live in households where other family members are employed, or may have had employment income earlier in the year. In either case, their equivalent annual income need not be low.

⁹ Something along these lines was in effect tried during the early years of the Accord, when restraint in union pushfulness resulted in the level of real wages for a broad section of the workforce falling. This restraint did indeed appear to be effective in promoting the growth of jobs, though this does not

Figure 5 (a)

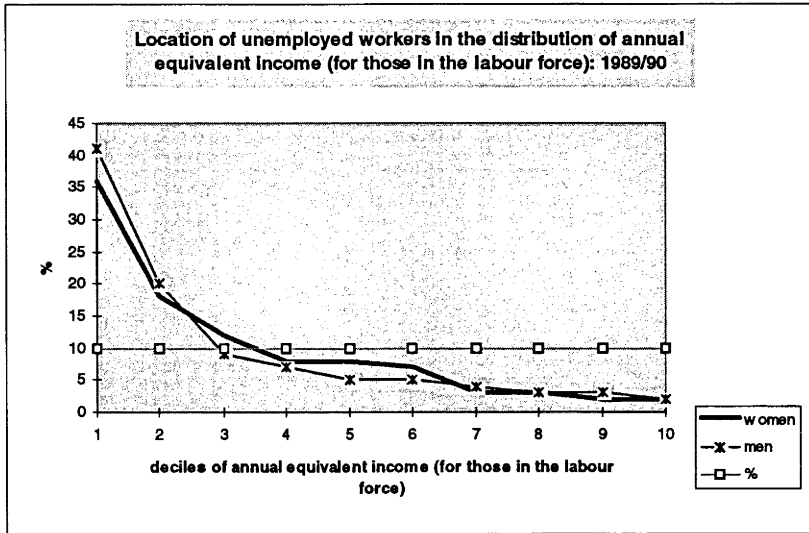
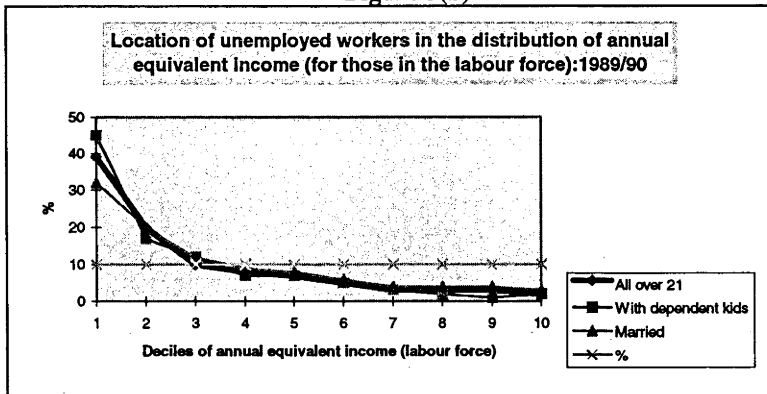


Figure 5(b)



Source: Own calculations from Survey of Income and Housing Costs, 1989/90, ABS

provide evidence that a cut in wages which was focussed on the lowest wages would be equally as effective.

paid would be much more effective in generating jobs than would cutting the pay of the well paid, before contemplating basing policy on such a presumption. In fact we know very little on that point.

It will be progressive to cut the pay of the low paid only if this does indeed generate sufficient jobs *for the unemployed*. The evidence that jobs are generated by a cut in low pay is, in my judgement, rather weak.¹⁰ But more than this, it is well known that many new jobs go to people who were previously outside the labour force, rather than to the unemployed. We may suppose, in the absence of any evidence, that these new entrants to low paid jobs are located across the income distribution in a manner that is similar to the distribution of existing low pay workers. That is, some of the people to get any new jobs generated will be secondary income earners working a small number of hours and already living in comfortably-off households. Others will be adults struggling to support their dependents, and to get a longer-term foothold in employment. If this operating assumption about who the newly employed are is correct, then the cut in low pay will be much less equalizing than when it is supposed that they are all drawn from the unemployment pool. Indeed, the less heavily concentrated are current low wage workers in the bottom of the income distribution, the less confident can we be that any people newly-employed in response to a wage cut will come from low income households. Why should they be different?

8. Conclusions

There have been rising levels of inequality in the earnings distribution in some OECD countries (principally the English-speaking ones) together with stubbornly high levels of unemployment in many others. This situation provides the background for why there is a current interest in the association between earning a low wage and living in a low income household (including a single person household). The rising inequality has led to renewed interest in the usefulness of legally binding minimum wages as an instrument to redress this.¹¹ The high unemployment has led to a renewed interest in removing restrictions on what employers must pay, in the hope that this will increase employment and reduce unemployment.

Australia has shared in the rise in earnings inequality, but not to the degree that the US, Canada and the UK have. It has also shared in the rise in persistent unemployment, but not to the degree that many continental European countries have. Thus the two motivations are relevant to the policy debate in Australia. The question is, would a cut in low wages harm people who are already poor? The answer is yes and no.

¹⁰ See, for example, Freeman, 1994 and the references therein, and Card and Kreuger, 1996.

¹¹ See, for example, Fernie and Metcalf, 1996 and the references therein, and Freeman, 1994.

The information on which this paper is based is not perfect. The data are 8 years old. The sample size is small for the group in which we are chiefly interested. Hourly wage has to be imputed. Many decisions have to be made about precisely how to define the variables and the groups for analysis. The key results are sensitive to the choice of low wage. For all these reasons, the conclusions should not be thought of as final. But they are the first detailed examination of the low wage group in Australia and their standing in the distribution of income.

One firm conclusion from the information presented above is that low wage earners are a diverse lot. There are indeed people who earn low wages who also live in comfortable middle and upper income households. There are also low wage workers who support dependent children and who struggle on low incomes. What is also clear is that the low wage workforce does not comprise principally young people who are just entering the workforce and who live comfortably at home while they are getting established, or are studying. While there are some people like this, the average age of low wage workers is in the mid-30s, for both men and women. In their age distribution, low wage workers look very like the workforce at large. Low wage workers are principally married people working full-time and are predominantly women.

The case that a cut in low wages would not disproportionately harm people who have low incomes is strongest when the question is looked at in the following way:

- the income distribution is chosen to include all persons (in this analysis, all persons old enough to be in the workforce)
- low wage is chosen to be \$9.50 per hour or less (for an adult)
- the focus is on workers who had no dependent children and who either worked only a small number of hours or who were single: about one third of low wage workers are so described.

The position that a cut in low wages would harm people who already have low incomes is strongest when

- the distribution of interest is that among the labour force
- the group in question receives the lower definitions of low wage
- the focus is on men and/or people with dependent children.

Thus defined, around 45 percent of people earning a low wage are in the bottom 3 deciles of the income distribution. A cut in low wages which was passed on evenly to all households in the form of lower prices (for example) would be quite regressive. Those on or below the AIRC standard--and hence directly affected by any formal move to cut this standard-- are even more concentrated at the bottom of the income distribution.

The distributional impact of a change in low wages depends substantially on the level at which low wages are set. The data strongly suggest that at the sort of wages which are discussed in the Australian context as an appropriate

minimum, wage earners are heavily concentrated at the bottom of the distribution of annual equivalent income.

A cut in low wages would undoubtedly hurt many people who live in low income households. The question of whether it would do so *disproportionately* depends on how low wage and low income are defined and whether the group of interest is the whole low wage labour force or some sub-set of it. Even if we take the case which is most favourable to a weak link between low wage and low income--the \$9.50 wage and the distribution of income among all who are over the age of 15--about one quarter of the people who are at risk of having their wages cut (around 250,000 people) are already in the bottom 3 deciles of the income distribution.

This paper has shown that low wage workers are very varied in their socio-economic characteristics. Most live in lower income households but some do not. A cut in low wages which focuses on those on around the AIRC minimum would quite regressive. The circumstances necessary to make the gain to the unemployed exceed the losses to low wage workers who have a low income appear to me to be quite implausible. A large majority of the people whose wages would be cut already have below average incomes. A rise in low wages for those near the current minimum would be progressive in its impact on the distribution of income among those in the labour force. But whether either of these policies is a good idea cannot be determined by reference to the evidence in this paper alone.

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