

# Macroeconomic Evaluations of Labour Market Programs

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## Abstract

*Labour market programs are time honoured microeconomic policies, which offer different solutions to different policy makers. Some advocate them to moderate wage inflation and thus complement macroeconomic demand expansion. For others, they are advanced as a second-best, but politically feasible, substitute for reducing real wages. For many, they are regarded as an equity measure to assist the very long-term unemployed. All these goals are macroeconomic, for the policy maker is interested in the number and type of people displaced from employment as a result of the labour market programs. However, despite this, the macroeconomic field of labour market program evaluations is surprisingly thin. Few direct measures exist in Australia and overseas on the aggregate employment effects of such programs and the inference from related works finds little consistent evidence that they increase aggregate employment. Furthermore, there is a lack of macroeconomic assessments of the equity effects.*

## Introduction

Labour market programs are time honoured microeconomic policies to affect the quality or quantity of demand or supply in targeted labour

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markets. More particularly, since the mid-1970s they have been funded to reduce aggregate unemployment and enhance equality of access to employment. Advocates are drawn from many disciplines and no recognisable school of thought promotes such programs as their own. Over the last four centuries (except for periods of chronic labour shortage), the recommendation for labour market programs appears to have stemmed from a lack of alternative policies for a recalcitrant unemployment problem rather than a deduction drawn from first principles. The logic is appealing and intuitive: if people are chronically out-of-work, pay some-one to employ them.

It is not possible to test for whether labour market programs have had any impact on either aggregate employment or equality of opportunity without a macroeconomic evaluation. *Microeconomic* evaluations abound, however these can only identify the partial equilibrium effects of a program. As such, they constitute important inputs into a macroeconomic evaluation for unless we can establish that a program has some partial effect, then it is unlikely to have a macroeconomic effect. However, microeconomic evaluations cannot provide policy justification on their own.

The intention of this review is to indicate the likely effects of labour market programs from the limited number of macroeconomic studies which provide either direct or indirect evidence. The following sections describe Australian labour market programs, present two common rationales for these programs and finally discuss the empirical findings with respect to both labour market bottlenecks and demand for labour. The last mentioned section will draw predominantly from the Australian literature, but given the paucity of studies, some reference is given to overseas studies. The paper finishes with a short conclusion. Unfortunately, there appear to be no published studies of the equity effects of labour market programs to-date and little can be said in this respect.

### **Australian labour market programs**

By convention, labour market programs which constitute grants or subsidies to firms or community organisations, are designated for the employment and training of specific types of disadvantaged person. By design, they are often little different from normal government appropriations in public employment and training. A labour market program nevertheless, is different from other types of government programs. The former prescribe employment selection criteria based on some indicator of disadvantage and are short lived, while the latter are openly contested.

Four main types of labour programs regularly appear – job creation, wages subsidy, training subsidy and placement services. The first three program types represent different ways of increasing the work skills of people either through learning-by-doing, formal on-the-job training or off-the-job training. Public sector job creation places are targeted at people who are not ready for formal classroom instruction and are continually overlooked by private sector employers. Wage subsidies are targeted at the more ‘work ready’ unemployed and formal training programs are targeted at the people who stand to benefit from specific institutional based training classes. By contrast, the more recently funded placement services, which can vary from job search training to intensive counselling, are intended to improve the matching technology. Since the early 1990s, program content has converged and many employment based programs, such as, job creation and wage subsidies, have evolved to include formal training and placement services. This blurring has intensified even more under the new Job Network. While each program type differs according to its means, all have the immediate objective of raising the profitability of employing the targeted group, either during the program period or after it, and as such should be treated as relatively homogeneous from a macroeconomic point of view.<sup>1</sup> The ultimate aims are to either improve the efficiency of the labour market or enhance the equality of access to employment.

In the last decade, Australian governments have appropriated large sums of money for labour market programs. The (Howard) Coalition Government has indicated that it will spend about \$1 billion per annum over the coming three years, and the rate of expenditure under the previous (Hawke/Keating) Labor Government was, at times, twice this amount. While the old Labor Government programs (JobStart, JobTrain, Job Skills etc) have been dismantled, it is probable, given the structure of the Job Network, that the four generic program types – job creation, wage subsidy, training subsidy and placement programs, will continue to exist in some form.

### **The rationale for labour market programs**

Labour market programs first appeared in Europe during the late sixteenth century when they were regarded as a remedy for idleness.<sup>2</sup> In modern times, the rationale for these programs has become more sophisticated so that the various justifications for labour market programs can be difficult to trace. In contemporary theories, the rationale for labour market programs figure more as add-ons than integral parts of basic macroeconomic models. Mainstream demand-side macroeconomic theories often subordinate the

labour market (by assuming labour is homogeneous) or assume that the unemployed are found at the tail end of a heterogeneous labour queue. Labour market programs, under these theories, will only rearrange the queue and not solve the basic cause of unemployment. Supply-side macroeconomic theories often argue that labour market intervention, either from governments or unions, are the cause of unemployment and inequitable employment opportunities. Accordingly, the supply-side theorist would argue for less, not more, government involvement in the labour market. As such, labour market programs remain a more popular tool for the eclectic economist.<sup>3</sup>

Eclectic demand-side economists argue that while unemployment is caused by a deficiency of aggregate demand, an expansion of demand will not remedy the situation, because labour market bottlenecks or concentrations of market power generate price rather than output effects.<sup>4</sup> Contemporary demand-side models have evolved from the group of theories that attempt to explain the historical correlation between wage or price inflation and the rate of unemployment. Since the 1960s, a literature has metamorphosed from the Phillips Curve into a Natural Rate of Unemployment (NRU) and subsequently a collation of NAIRU theories. While considerable inconsistency exists in the terminology between authors, most economists associated with these ideas accept that raising aggregate demand spills over into both prices and employment. Unemployment, however, is the major factor that acts as a brake on inflation. The level of unemployment, at which average prices are constant *ceteris paribus*, is the equilibrium rate of unemployment (as expressed by the NRU or NAIRU).<sup>5</sup> Depending on the schools of thought, this equilibrium may be found at either above or below full employment.<sup>6</sup>

The microeconomic mechanism by which a demand stimulus translates into higher wages rather than higher production is the subject of several hypotheses. In one hypothesis, incumbent employees – insiders – have considerably greater bargaining power over the unemployed – outsiders – because the firm invests considerable resources into equipping them with a knowledge and understanding of its internal and external operations (Lindbeck and Snower 1986). The tighter the labour market, and, accordingly, the less the threat of dismissal, the greater the incentive for and ability of labour to successfully bargain for higher wages. The presence of active labour unions further adds to workers' power. Variations of this theory also argue that the power of insiders is directly reinforced by the lack of informal work skills held by outsiders. The longer a person is out of work, the more they become out of touch with the world of work and subsequently the less

wage pressure they may bring to bear upon insiders' wage negotiations.<sup>7</sup> Growing firms would rather poach existing workers from rivals by offering better wages, than hire someone who has been out of work for over a year. It is the proportion of the labour force in short-term unemployment, not total unemployment, which acts to keep the labour market competitive and wage pressures low. However, when unemployment is rising, people are more likely to move from short-term unemployment into long-term unemployment instead of into a job. Thus rising or sustained unemployment over time does not progressively increase the portion of short-term unemployment, keeping the labour market competitive.

In addition, supply-side economists, and some demand-side economists, regard excessive real wage growth as a contributory factor in low aggregate employment. Excessive nominal wage demands translates into excessive real wages growth if the product market environment does not allow firms to fully pass on their cost increases.<sup>8</sup>

The unemployment-inflation trade-off appeared to have worsened during the 1980s in many developed countries (Watts and Mitchell 1990, Layard, Nickell and Jackman 1991, Groenewold and Taylor 1992, Chapman 1993, Mitchell 1994, McDonald 1995). The major thesis of these authors is that sustained and rising unemployment over this period lead to a disenfranchisement of many former workers and lessened their power to reduce nominal wage pressures. In this context, labour market programs will encourage or enable higher employment growth if they reduce the skill differential between insiders and outsiders and contribute to enough additional competition in the labour market to exert downward pressure on nominal wage growth.<sup>9</sup> However, while the supply-side model argues that these effects are sufficient to promote employment growth, demand-side proponents also require an exogenous growth in demand from either the government or overseas for the practical impact of the real balance effect from lower inflation is negligible.<sup>10</sup>

Aside from the controversial effect on aggregate demand for labour, labour market programs have also been advocated to improve a worsening mismatch between the unemployed and vacancies in the labour market. Any advance labour market programs make towards filling hard-to-fill vacancies will, constitutes a net efficiency gain, to the extent the vacancy is filled earlier than otherwise. The filled position is at the expense of overtime work or production forgone and not at the expense of another person's job.

## **The empirical literature**

Direct and reliable evidence on the macroeconomic effects of labour market programs using time series data can be difficult to obtain, because of the small size of labour market program expenditures relative to total unemployment or GDP. Few international rules of thumb can be gleaned from the aggregate data and the econometric evidence is mixed (Calmfors 1993). Low unemployment in Sweden has frequently been attributed to the Swedish interventionist labour market policies, however at the same time, low Japanese unemployment has always been associated with very low expenditure on labour market programs (OECD 1994).<sup>11</sup> Moreover, because government policy stance is often endogenous, that is, governments directly vary labour market program expenditures with the unemployment rate, care must be taken to disentangle cause and effect in statistical work.<sup>12</sup> Consequently, macroeconomic effects are often inferred from theory and incomplete evidence.

Macroeconomic evaluations must also judge the outcomes of a program against outcomes under alternative uses for the funds. However in practice, this judgement is rarely done and the practice of including labour market program expenditures in regression equations, without compensating changes to the levels of other government spending or taxes, implicitly assumes that the labour market programs are a net addition to a government deficit which has been financed in an interest neutral way (by a combination of monetary expansion and public borrowing).

In the remaining part of this section we will first discuss evidence that labour market programs have impacted upon the Beveridge curve and subsequently discuss their effects on aggregate demand for labour. Most papers treat labour market programs as homogenous partly because they are assumed to operate in similar ways (differences being due to clients' varying needs) and also because of the practical difficulty of disaggregating programs which have metamorphosed over time.

## **Labour market bottlenecks**

Labour market programs have been advocated as policies to reduce mismatch between available skill and employer demands and accordingly, to reverse any outward drift in the Beveridge curve. Analyses of the worsening Beveridge curve in Western industrialised countries since the 1960s suggest that mismatch does not exist in the conventional occupation or educational qualification sense but in a more subtle way.<sup>13</sup> According to study by Layard, Nickell and Jackman (1991) of 11 OECD countries, including

Australia, employers have simply become more choosy about who they hire, and would prefer to continue searching than take on a worker who may prove to be unsuitable. Workers also have become choosier about what jobs they take.

Labour market programs may cause vacancies to be filled earlier if the program assists the job search process, equips the participant with better work-related skills, or reduces hiring uncertainty for employers. If employers' reluctance to hire an unemployed person is due to their lack of work readiness or the risk felt by employers, wage subsidy programs may assuage these uncertainties. Placement programs can reduce labour market bottlenecks only if the jobs are genuinely hard-to-fill. Otherwise, such programs, will only substitute one type of labour for another.

Using data from 14 OECD countries, covering the period 1971 to 1988, Jackman, Pissarides and Savouri (1990) found some evidence to support the theory that labour market programs shift the Beveridge curve inward. However, a more recent Australian study by Webster (1998) did not find unambiguous evidence that labour market program expenditure had had an impact on the Beveridge curve between 1978 to 1997.

## Aggregate demand for labour

Labour market programs can have two different employment effects – during the program and after the program. The employment consequences during programs were emphasised by Australian governments with the expansion of labour market programs in the 1970s and early 1980s, while the post-program effects received most attention following the hysteresis literature of the late 1980s and 1990s.

### *Aggregate employment: in-program effects*

Figure 1 provides a simple schema to allow us to make estimates of the in-program effects using results from existing studies. The size of aggregate employment during the program period, depends on how many of the original participants (located at **(A)**) fall into the additional employees sub-set (**(H)**). Calculations based on microeconomic evaluations by the Department of Employment, Education, Training and Youth Affairs (DEETYA 1997) estimate that only 70 per cent of the original participants only got a job as a result of the labour market program (ie are part of **(C)**). Little empirical work has been done in estimating how many of these jobs were additional to the firm, that is **(F)** rather than **(D)** or **(E)**. Evaluations from Australia and Europe suggest that between 15 to 30 per cent of jobs were

Figure 1: In-program employment effects

Pre program	Program period	
(A) Unemployed ↗ ↘	(B) Same person would have gained a job anyway	
	(D) Replaced another unemployed person	
	(C) Got a job as a result of the subsidy ↗ → ↘	(E) Replaced some one already in a job or not-in-the-labour force
	(F) Took an extra job in the firm, which was offered because of wage subsidy → ↘	(G) Extra job offered at expense of job in rival firms
	(H) Extra job a net addition to aggregate employment	

only offered because of the subsidy (Bureau of Labour Market Research 1984c, Department of Employment, Education and Training (DEET) 1989, DEET 1994c, OECD 1993, Bellmann and Jackman 1996a). The remaining 70 to 85 per cent therefore resulted in a re-ordering of the queue of potential applicants for a job, and a substitution of one person for another. If these estimates are valid, we find that only 10 to 20 per cent of the original unemployed counted at point (A), are included in sub-set (F). The Australian estimates are derived from surveys which asked employers whether the job was additional to their normal requirements and given the difficulties with this method, these estimates should be treated with caution. However, according to this study, employers who said that the job was additional were less likely to retain the participant after the subsidy period had ended which tends to confirm their estimate of additionally.

There is unlikely to be any survey method capable of estimating whether the job was attained at the expense of another firm, that is whether the job falls into category (G) or (H). The job will only be additional if more labour-intensive techniques of production are introduced (or preserved) or the profitability of increasing production has risen compared with the scenario under which labour market program funds are used elsewhere. After we account for the effects of these alternative uses, demand-side



models would reduce this 10 to 20 per cent estimate considerably. If alternate forms of expenditure are in labour intensive education and community services, then this difference could be zero and labour market programs will have no net in-program effects on total employment. It is not surprising therefore to find that labour market advocates tend to sell labour market programs on the basis of their post-program rather than in-program effects.

*Aggregate employment: post-program effects*

**Figure 2:** Post-program employment effects

Pre program	Program period	Post-program
		(K) Same person would have gained a job anyway
(I) Unemployed	(J) Wage subsidy ↗ Training subsidy Job creation Placement services ↘	(M) Replaced another unemployed person
		(L) Got a job ↗ as a result of the → program ↘
		(N) Replaced some one already in a job or not-in-the-labour force
		(O) Took an additional job because the person is considered more profitable to employ than had they not participated in program

Figure 2 breaks down the process by which labour market programs lead to an increase in aggregate employment after the program has ended. The size of the expansion of aggregate employment depends on how many of the original participants (counted under (I)) fall into sub-set (O). Whether a participant got a job purely as a result of the program (L) or would have been hired any-way (K), can be estimated from microeconomic evaluations. The most recent Australian microeconomic evaluation by Stromback, Dockery and Ying (1998: Table 12) estimate that placement and training programs have no significant effect on the post-program employment rate

of participants but employment based job creation and wage subsidy programs raise the open employment rate from about 20 to 40 per cent.

However, beyond this point we must infer from theory and indirect evidence. According to the macroeconomic theories discussed above, the job is likely to be additional if there is greater wage competition, less inflation and the government increases aggregate demand (demand-side theories) or there is more wage competition and a lower real wage (supply-side theories). All these relativities have of course to be compared with the effect on the labour market of alternative uses for the labour market program funds.

To summarise, labour market programs may affect aggregate employment if they cause some moderation of wage inflation (under the demand side model) or real wages (under the supply side model). One of the major ways labour market programs are claimed to reduce wage growth is by reversing some of the skill atrophy in the labour market stemming from the hysteresis process. The following literature review tests for possible relationships, or connections, in the employment-effect links of various labour market programs.

### *Effect of LMPs on the rate of unemployment*

As mentioned above, very few published studies attempt to estimate the post-program macroeconomic relationship between labour market programs and unemployment using aggregate time series analysis and most studies investigate the existence of one or two links in the sequence outlined in Figure 2.<sup>14</sup> Nevertheless, two studies examine this relationship directly. The study by Bellmann and Jackman (1996b) used pooled cross-sectional time series data from 17 OECD countries in the period 1975 to 1993 to directly test for the effects of labour market program expenditure on the unemployment rate. They estimated the equation:

Rate of unemployment =  $f$  (labour market program expenditure per unemployed person, the replacement ratio, duration of unemployment benefits, degree of centralisation of wage bargaining, institutional sclerosis, union density and usage of temporary employment).

They found that the labour market program had no influence on the rate or growth of unemployment, although it did reduce the incidence of long term unemployment.

Calmfors and Skedinger (1995) used pooled cross-sectional and time series data from Sweden to test for the effects of job creation programs and training programs on regional jobless rates. They tested a variety of models – with an equivalent large variation in the results – but found some evidence

that job creation programs raised local jobless rates, while training programs, especially those targeted at youth, tend to lower the regional unemployment rate. They conclude that training programs are likely to restrain wages but job creation schemes are not. However, given the dependent variable is the regional unemployment rate, the labour market programs may be merely changing the distribution of unemployment across Sweden and not changing its national rate. After noting their own estimation problem and contrary results from other studies, Calmfors and Skedinger conclude that the effects on employment, either positive or negative, are weak.

### *Effect of LMPs on inflation*

Layard, Nickell and Jackman (1991) tests for a direct relationship between labour market programs and inflation. Using data from 20 countries from 1983 to 1988, they estimated:

Change in inflation =  $f$ (duration of unemployment benefits, replacement ratio, expenditure on labour market programs, unions coverage, co-ordination between unions, degree of co-ordination between employers, the rate of unemployment).<sup>15</sup>

They got significant results for all variables. However, they estimate the equation with the change in inflation on the right hand side and unemployment on the left-hand side, which incorrectly represents the theoretically derived causal relationship. Forslund and Kreuger re-estimated this equation with 1993 data and found the labour market program variable lost its significance and changed its sign (cited in Calmfors and Skedinger 1995: 93).

### *Effect of LMPs on relative wages*

A cross-sectional evaluation by Anderton and Soteri (1996) of an intensive counselling and placement service, Restart, in the UK, found some evidence of a dampening effect on relative wages for manual workers, but also evidence that the program could have raised youth wages in some low skilled sectors. Furthermore, the frequency of long-term unemployed had less effect on wages than short-term unemployed. An earlier time-series Swedish study by Calmfors and Forslund (1991) estimated that labour market program expenditure was positively associated with a rise in real wages. However, the authors noted also that this correlation may not be a causal relationship but a result of the anti-cyclical labour market program policy stance during this period.

### *Effect of LMPs on the incidence of long-term unemployment*

The majority of empirical evidence for labour market hysteresis is based on a time series correlation between a deteriorating unemployment: inflation relationship on the one hand and rising long term unemployed on the other (Watts and Mitchell 1990, Layard, Nickell and Jackman 1991, Groenewold and Taylor 1992, Chapman 1993, Mitchell 1994, Olekalns, Crosby and Otto 1997). It is argued that a positive relationship exists because the long term unemployed are not an effective supply of labour and, thus, do not act as a check on wages. Any measure, therefore, which transforms the long-term unemployed into effectual labour market competitors will reverse the natural hysteresis. However, employment based programs, which are specifically targeted at the long-term unemployed, will reduce the long-term unemployed even if it just involves taking them out of unemployment temporarily, because unemployment duration counts re-set to zero if a person has a job for longer than two weeks. It still needs to be proven, therefore, that labour market programs have converted the long-term unemployed into an effective labour supply in the markets most prone to wage inflation. Unfortunately, most of the studies here do not address this final link.

Junankar and Kapuscinski (1998) estimated the effects of the Australian Labor Government's *Working Nation* labour market programs from 1994 to 1996 by comparing the incidence of long-term unemployment since its commencement by interpolation based on employment data from 1983 to 1993. Their results indicated that the incidence of male long-term unemployment was lower post-1994, but there was possibly a higher female rate. However, as noted by the authors, this method of evaluation does not account for other government policies, that may have affected the portion of long-term labour market. Most importantly, the study's lack of account for pre-1994 labour market program expenditures (which varied considerably over the last two decades) makes the interpretation of their results less clear.

Connolly and Nicol (1997) tested the proposition that an increase in expenditure on Australian labour market programs (per member of the labour force) reduces the portion of unemployed with durations of more than 52 weeks. They found a significant, negative relationship. However, both these studies may be picking up some effects of a re-setting of duration counts, or the displacement from employment of short-term unemployed (or persons not-in-the-labour force or existing employees), and not just an improvement in the long-run employment performance of the disadvantaged groups.

Using Australian data from 1989-95, Leeves (1997) found that labour market programs had no effect on the transition of short-term unemployed into employment but had a positive effect on this movement for long-term unemployed. However, Leeves noted that some of this movement was into sheltered employment offered by labour market programs and not open employment. Furthermore, whether this improvement has been at the expense of people in employment or those out of the labour force (who would now be non-employed) is unknown. Over a third of flows into employment traditionally come from persons not-in-the-labour force.

A large cross-country study by Jackman, Layard and Nickell (1996) covering the periods 1983-88 and 1989-94 found that labour market program expenditures did not reduce the portion of the labour force in short-term unemployment, and the effect on the portion of long-term unemployed was only significant when Sweden was included in the sample. They found instead that the strength of the employment protection laws and the centralised nature of the wages system were the more important factors in determining the portion of the labour force in long-term unemployed, and, subsequently, the size of the NAIRU.

### *Effect of the incidence of long-term unemployment on real wages*

Even if labour market programs did reduce the number of long-term unemployed, their subsequent effect on the effective labour supply and wage competition still needs to be established. Post-program surveys undertaken by the Australian Department of Employment, Education, Training and Youth Affairs (DEETYA, formerly DEET) suggest that participation in labour market programs does affect the employability of some, but not all, long-term unemployed. However, whether these programs affect competition in the inflation-prone markets is a separate matter. Flatau, Lewis and Rushton (1991) found a positive and significant relationship between the number (not portion) of long-term unemployed and the real wage but the size of the effects are very small. Using data from 1983 to 1990, Flatau, Kenyon, Lewis and Rushton (1991) found a positive relationship between the real wage and both the number of long- and short-term unemployed. However, the historical effect that the short-term unemployed have had in reducing wage competition may not continue, if the short-term unemployed are increasingly made up of re-cycled long term unemployed and people with broken working careers rather than people with continuous work histories who are displaced temporarily.

Using data of most OECD countries for the period 1985-1990, the OECD (1993) itself found that labour market program expenditure exerted a downward pressure on real wages when account was taken of unemployment, productivity and terms of trade. The OECD study claimed to have controlled for the relationship from unemployment to labour market program expenditures, but it is not clear that they catered for the possible two-way relationship between real wages and unemployment. Two studies from Sweden have contradictory conclusions on whether labour market programs add to or subtracted from wage inflation (OECD 1993, Calmfors and Lang 1995). A study by Calmfors and Forslund (1991) argued that labour market programs might raise inflation because they diminish the consequences of losing one's job, however another study by Forslund in 1992 found that wage pressures were reduced by labour market programs. Carling *et al* (1996) found no evidence that an increased availability of labour market programs in Sweden makes the unemployed less inclined to search for open employment.

## Conclusions

It is easy to see why few macroeconomic evaluations of labour market programs are undertaken. The number of endogenous and difficult-to-measure concepts can make the research method uncertain and the results hedged in qualifications. Good evidence exists from micro studies that labour market programs, especially the longer employment-based programs, reorder the job queue for participants, certainly during the program and to some extent after the program. When the programs are targeted at the long-term unemployed, this group's transition into open employment has risen, but at whose expense is unclear. If this group has merely replaced the short-term unemployed, discouraged workers, or employed person with erratic work histories then the benefit of labour market programs in reducing unemployment and inequality is less certain.

With respect to aggregate employment, we have split the effects into the effect on employment during the program period and after the program has ended. While the in-program effects were a common form of justification during the 1970s and early 1980s, their effects on the aggregate employment level has received almost no attention in the recent literature. This is probably because the demand-side models suggest that such effects would be negligible if the funds were alternatively spent on government projects with similar domestic value-added content.

Accordingly, most recent evaluations have concentrated instead on the post-program effects, most particularly the effects on wage competition. Evidence to support a strong, positive causal link from labour market programs to effective labour supply and through to wage competition and, subsequently, inflation or real wages, is patchy and fraught with specification difficulties. This is not surprising. Occupations in the greatest shortage and, subsequently, those where wages have grown the fastest, and occupations where the presence of firm-specific skills is most likely to create a series of bilateral monopolies (predominantly professional, technical, para-professional) usually require a sound general education rather than the type of short vocational training offered by labour market programs. Attracting people who have left school early into extended education and formal training is often difficult.

Better ways than labour market programs may exist to increase competition in specific labour markets. Reducing the very high marginal effective tax rates on households receiving unemployment benefits, increasing the adaptability of the wage-setting process, altering wage structures to reflect more closely the costs and benefits of training, minimising the skill loss arising from firms which downsize and shed skilled staff and increasing the transferability of skills between several related occupations may contribute as much as or more than labour market programs in reducing wage inflation. If bilateral monopoly power is a major contributory factor in fuelling inflation, then a broader incomes policy arrangement may be more appropriate.

The concentration on microeconomic evaluations of labour market programs to the exclusion of macroeconomic evaluations represents a serious imbalance in the Australian and overseas literature. The former are important inputs into a macro evaluation but cannot provide policy justification on their own. A decent policy debate in Australia requires many macroeconomic studies from various perspectives and not the limited number of offerings surveyed here.

Nevertheless, if we accept what evidence we have, strong grounds do not exist for believing that labour market programs either lead directly to higher employment via a re-skilling of the labour force or a reduction in real wages, or provide the conditions for a fiscal stimulus by dampening wage inflation. It remains therefore that labour market programs should be promoted as an equality of opportunity device. A worthy goal but one currently advocated more on intuition and faith than comprehensive research.

## Notes

- 1 Microeconomic evaluations often find that some programs are more effective than others however it is difficult to achieve a consensus on these absolute or relative differentials. Differences may be due to the distinct conditions attached to each program type (they can be very heterogeneous), the different target demographic group or the different stages of the trade cycle. Not enough is known about the nature of these effects to give a clear summary.
- 2 Garraty (1978: Ch 3).
- 3 Such as Layard et al (1991), OECD (1993), Piggot and Chapman (1995), Chapman (1997), Quiggin (1993).
- 4 The need to limit foreign debt (public and private) and overheating in asset markets are also reasons limiting government-induced expansion of aggregate demand. However, to keep the discussion simple, the main difficulty is characterised as inflation.
- 5 Inclusion of the term *ceteris paribus* is crucial here, for if inflationary expectations are positive and influential in setting wages and prices, the equilibrium rate of unemployment will be associated with a constant rate of inflation.
- 6 The NAIRU is not embraced by all Keynesians as many believe the NAIRU is too volatile to have any practical or theoretical value. See Galbraith (1997).
- 7 The distinct, but related, efficiency wage theory argues that employers initiate wage rises to keep valued employees keen, enthusiastic and hard working and less liable to quit. These types of employers will not drop nominal wages and will always seek to keep wages above market-clearing and in line with their competitors.
- 8 Brown, Ingran and Wadsworth (1997: 2) found in the UK that real wage reductions are more prevalent when inflation is relatively high.
- 9 Swedish economists Calmfors and Lang (1995) have argued that large-scale labour market programs can reduce competition in labour markets by removing the fear of unemployment. However, this is unlikely to apply to Australia where expenditure on labour market programs is both considerably lower, more volatile and uncertain than in Sweden.
- 10 Many demand-side economists would not accept the twin deficits argument which relies upon the assumption that the economy is already on the NAIRU and will not yield to domestic demand stimulation.
- 11 Calmfors (1993) has argued that Swedish unemployment is more affected by their macroeconomic stance than the level of their labour market program expenditures.
- 12 One approach has been to enter the labour market program variable as a lagged variable. OECD (1993) tried unsuccessfully to model the effect of labour market programs on the relationship between aggregate employment growth and GDP growth (via improving labour market matching).
- 13 See Webster (1998).
- 14 OECD (1993) tried unsuccessfully, but we have reservations about the specification of their wage equation. If labour market programs increase employment, it does so by raising GDP either because of a lower real wage or because a stimulus to autonomous sources of demand. As such it is double counting to include the real wage and GDP on the right hand side of the same equation.
- 15 The first six variables were meant to be the structural determinants of the NAIRU.



## References

- Anderton B. and Soteri S. (1996) 'Wage determination and active labour market programs', National Industry Economic and Social Research Discussion Paper no. 96.
- Bellmann L. and Jackman R. (1996a) 'Aggregate impact analysis' in Schmid G, O'Reilly J and Schömann K (1996) (eds.) *International Handbook of Labour Market Policy and Evaluation*, Brookfield, US, Cheltenham, UK: Edward Elgar.
- Bellmann L. and Jackman R. (1996b) 'The impact of labour market policies on wages, employment and labour market mismatch' in Schmid G, O'Reilly J and Schömann K (1996) (eds.) *International Handbook of labour market Policy and Evaluation*, Brookfield, US, Cheltenham, UK: Edward Elgar.
- Brown D., Ingram P. and Wadsworth J. (1997) 'The price is right: Inflation and nominal wage adjustment in Britain', Centre for Economic Performance, London School of Economics, Discussion Paper no. 326.
- Bureau of Labour Market Research (1984) *Submission to the Committee of Inquiry into Labour Market Programs*, Bureau of Labour Market Research monograph series, no. 5, AGPS, Canberra.
- Calmfors L. and Forslund A. (1991) 'Real wage determination and labour market policies: The Swedish experience', *Economic Journal*, 101, 1130-48.
- Calmfors L. and Lang H. (1995) 'Macroeconomic effects of active labour market programmes in a union wage-setting model', *Economic Journal*, 105, 601-19.
- Calmfors L. and Skedinger P. (1995) 'Does active labour market policy increase employment? Theoretical considerations and some empirical evidence from Sweden', *Oxford Review of Economic Policy*, 11, 91-109.
- Calmfors L. (1993) 'Lessons from the macroeconomic experience of Sweden', *European Journal of Political Economy*, 9, 25-72.
- Carling K., Edin P.A., Harkman A. and Holmlund B. (1996) 'Unemployment duration, unemployment benefits and labor market programs in Sweden', *Journal of Public Economics*, 59, 313-34.
- Chapman B. (1993a) 'The case for addressing the long term unemployment issue', Centre for Economic Policy Research, Research School of Social Sciences, ANU.
- Chapman B. (1993b) 'Long term unemployment: The dimensions of the problem', *Australian Economic Review*, 102, 22-25.
- Chapman B. (1997) 'Labour market programs', Industries Commission workshop, *Changing Labour Markets – Prospects for Productivity Growth*, Melbourne.
- Committee of Inquiry into Labour Market Programs (1984) *Report of the Committee of Inquiry into Labour Market Programs (Kirby Report)*, Canberra, AGPS.
- Committee on Employment Opportunities (1993) *Restoring Full Employment*, Canberra, AGPS.
- Connolly G. and Nicol D. (1997) 'The effect of expenditure on labour market assistance and urban and regional development in the incidence of long term unemployment', Department of Employment Education Training and Youth Affairs, Economic Conditions and Forecasting Section, Canberra.
- Cornwall J. (1997) 'What remains of Keynes?' *An Encyclopaedia of Keynesian Economics*, Brookfield, US, Cheltenham, UK: Edward Elgar.
- Department of Employment, Education and Training (1989) *Jobstart Evaluation*, Program Review and Income Support Branch, Canberra.

- Department of Employment, Education and Training (1994) *Survey of Jobstart Employers*. By A. Byrne and K. Buchanan, EMB Report 6/94, AGPS, Canberra.
- Department of Employment, Education, Training and Youth Affairs (1997) *The Net Impact of Labour Market Programmes*. Evaluation and Monitoring Branch, EMB Report 2/97, Canberra.
- Department of Employment, Education, Training and Youth Affairs (1997) *The New Impact of Labour market Programmes*, EMB Report 2/97, Canberra, Economic and Policy Division.
- Fitoussi J.P. (1994) 'Wage distribution and unemployment: The French experience', *American Economic Review*, 84, 59-64.
- Flatau P., Kenyon P., Lewis P.E.T. and Rushton A. (1991) 'The Accord, corporatism and outsiders in the labour market', *Contemporary Issues in Australian Economics* Johnson MR, Kriesler P. and Owen A.D. (eds.), The Economic Society of Australia, Sydney, Melbourne: Macmillan.
- Flatau P., Lewis P.E.T. and Rushton A. (1991) 'The macroeconomic consequences of long term unemployment', *Australian Economic Review*, 96, 48-56.
- Galbraith J.K. (1997) 'Time to ditch the NAIRU', *Journal of Economic Perspectives*, 11, 93-108.
- Garraty J.A. (1978) *Unemployment in History*, New York, Harper Colophon Books.
- Groenewold N. and Taylor L. (1992) 'Insider power as a source of hysteresis in unemployment: Tests with Australian data', *Economic Record*, 62, 57-64.
- Heckman J.J. and Smith J.A. (1996) 'Experimental and non-experimental evaluations', in Schmid G., O'Reilly J. and Schömann K. (eds.), *International Handbook of Labour Market Policy and Evaluation*, Brookfield, US and Cheltenham, UK: Edward Elgar.
- Heylen F., Goubert L. and Omev E. (1996) 'Unemployment in Europe: A problem of relative or aggregate demand for labour?' *International Labour Review*, 135, 17-36.
- Jackman R., Layard R. and Nickell S. (1996) 'Combating unemployment: Is flexibility enough?', Centre for Economic Policy Performance, London School of Economics, London.
- Jackman R., Pissarides C. and Savouri S. (1990) 'Labour market policies and unemployment in the OECD', *Economic Policy*, 5, 450-92.
- Junankar P.N. and Kapuscinski C.A. (1998) 'Was Working Nation working?', *Journal of Industrial Relations*, 40, 25-41.
- Layard R., Nickell S. and Jackman R. (1991) *Unemployment. Macroeconomic Performance and the Labour Market*, Oxford: OUP.
- Leeves G. (1997) 'Duration specific unemployment outflows and labour market training', Australian Labour Market Research Workshop, February 1997, Centre for Labour market Research, Curtin University, Perth.
- Lewis P.E.T. and Ryan C.A. (1985) 'Wage subsidies, their employment effects and how to evaluate them', Bureau of Labour Market Research, Working Paper 51, Canberra.
- Lindbeck A. and Snower D. (1986) 'Wage setting, unemployment and insider outsider relations', *American Economic Review*, Supplement, 76, 235.
- MacDonald H. (1995) 'Implementation of the JobSkills program by the Brotherhood of St Laurence', Social Policy and Research Paper no 9507, Brotherhood of St Laurence, Fitzroy, VIC.

- Marshall A. (1890) *Principles of Economics*, 8<sup>th</sup> edition, London: Macmillan, 1920.
- Mitchell W.F. (1994) 'Restoring Full Employment: A problem of policy balance', *Australian Economic Review*, 105, 24-30.
- Olekalns N., Crosby M. and Otto G. (1996) 'Inflation, unemployment and the NAIRU in Australia', mimeo, University of Melbourne.
- OECD (1993) 'Active labour market policies; Assessing macroeconomic and microeconomic effects', *Economic Outlook*, 39-80.
- OECD (1994) *The OECD Jobs Study: Evidence and Explanations. Part II- The adjustment Potential of the Labour Market*. OECD, Paris.
- Piggot J. and Chapman B. (1995) 'Costing the Job Compact', *Economic Record*, 71, 313-28.
- Quiggin J. (1993a) 'A policy program for full employment', *Australian Economic Review*, 102, 41-47.
- Quiggin J. (1993b) 'The rise in unemployment: An analysis and a program', Centre for Economic Policy Research, ANU Discussion Paper no. 294.
- Reynolds P.J. (1996) 'Kalecki's theory of prices and distribution', in *An alternative Macroeconomic Theory: The Kaleckian Model and Post-Keynesian Economics*, (ed) J.E. King, Boston, Dordrecht, London, Kluwer Academic Press.
- Snower D.J. (1995) 'Evaluating unemployment policies: What do the underlying theories tell us?', *Oxford Review of Economic Policy*, 11, 110-35.
- Stromback T., Dockery M. and Ying W. (1998) 'Labour market program and labour market outcomes', Melbourne Institute Working Paper Series 14/98.
- Webster E. (1998) 'Labour market programs and the Australian Beveridge Curve: 1978 to 1997', Melbourne Institute mimeo.