The Costs of Unemployment in Australia

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ABSTRACT

The unemployment rate has been consistently above 5 per cent in Australia since the first oil shock in the early 1970s. The current Coalition Government and the previous Labor Government have not pursued coherent employment policies. Further the persistently high unemployment has imposed an unequal burden across members of Australian society. Consequently the unemployment rate cannot be construed as the optimal outcome of the pursuit of a collective goal, such as low inflation.

In this paper it is demonstrated that the measurable costs of the sustained high rate of unemployment in Australia are substantially higher than the alleged gains from neo-liberal (microeconomic) reforms. In addition, significant individual and social costs are documented. Consequently macroeconomic intervention to reduce unemployment should be viewed as a priority, rather than the imposition of market reform with its uncertain impact.

The paper concludes with a brief outline of a Job Guarantee Program, advocated by Mitchell (1998), that utilises the principles of the buffer stock mechanism to reduce unemployment. These jobs would be designed to increase per capita social welfare by satisfying social needs that are not met by the private sector in areas including the environment, social services and health. It is shown that the net increase in government outlays is modest and would be offset by a reduction of annual corporate welfare.

1. Introduction

Since the first of the oil shocks in the early 1970s the Australian unemployment rate has exhibited a long term cumulative increase. In the last two decades, the lowest rate of unemployment was 5.4 per cent (November 1989). Over the last decade both the current Howard Coalition Government and the previous Labor Government have eschewed the adoption of policies of direct job creation to reduce the rate of unemployment. Fiscal policy has been geared to the achievement of budget surpluses, ostensibly to improve the level of net exports under the twin deficits dogma and to reduce pressure on domestic interest rates under the crowding out hypothesis. At the same time monetary policy has been geared to keeping inflation low. An agenda of extensive labour and product market reform commenced when the Labor Government was in power and has accelerated under the Coalition. The current Government does not have an explicit employment policy. Strong *economic fundamentals* allied with deregulated markets are viewed as both necessary and sufficient for the return to full employment, even though the Coalition's track record with respect to unemployment is disappointing (see Figure 1). The rate of unemployment has remained above 6 per cent after the Coalition inherited a rate of 8.9 per cent in March 1996 in an environment of low inflation. By contrast in 1974, the rate of unemployment was less than 3 per cent. At the same time unemployment is now viewed as an individual problem rather than a collective problem. This is epitomised by the introduction by the Work for the Dole scheme at the end of 1997 and its consolidation through the development of mutual obligation in mid-1998.

Further the disparate rates of unemployment across groups, including by age, country of origin, educational attainment and region, and the long term increase in the average duration of unemployment confirm that the burden of unemployment is not equally shared. The solution to this malaise is always further reform, rather than a fundamental change in policy. Despite the OECD Jobs Study (1994), there is increasing skepticism about the capacity of neo-liberal reforms to reduce the high unemployment rates that have prevailed in most OECD economies since the mid-1970s.

Most researchers acknowledge that the costs of the sustained high unemployment in Australia and other developed economies are substantial (Sen, 1997, Junankur and Kapuscinski, 1992, Watts, 2000). In this paper, we examine the economic and social costs of unemployment associated with the Australian economy using September 1998 as the basis of the analysis. At that time the unemployment rate was 8 per cent. Using conservative assumptions, the foregone output resulting from the unemployment rate

being above its full employment rate, assumed to be 2 per cent is estimated to be in the order of $37 billion. This assumes that full employment was to be achieved through an exclusively private sector recovery. On the other hand, under a job creation program enacted by government the value of foregone output is calculated to be about $31 billion, due the conservative assumption of lower productivity in the public sector. These costs of unemployment dwarf the benefits of microeconomic reform, which at the very least suggests that direct macroeconomic intervention should be a priority (Watts and Mitchell, 2000).

Recognising these high economic and social costs of unemployment, Mitchell (1998) advocates a Job Guarantee (JG) Program under the principles of the buffer stock mechanism to reduce unemployment in Australia. These jobs would be designed to increase per capita social welfare by satisfying social needs that are not met by the private sector in areas including environmental services, community and social services, health and education. Thus this increase in public sector employment would contribute to the reduction in the negative externalities that tend to increase with increasing levels of production by increasing the share of final output that is associated with green, public sector employment. We briefly examine the costs and benefits of a JG program in contrast to the uncertain impact of neo-liberal policies.

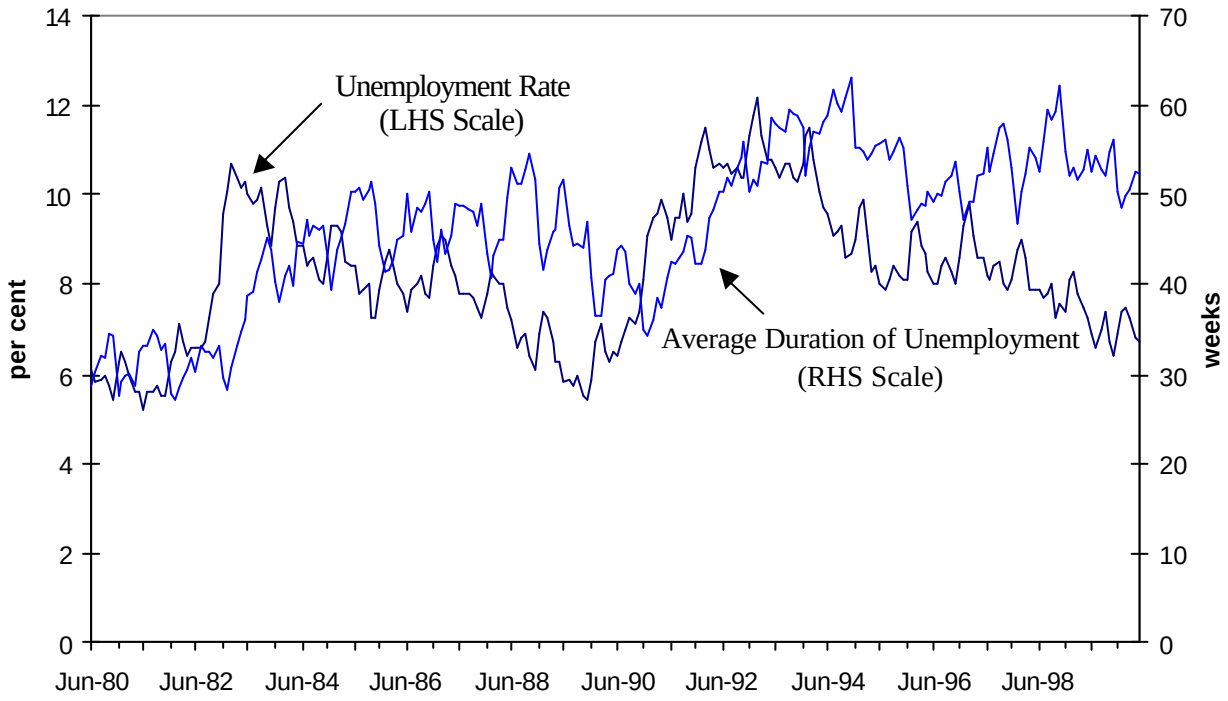
2. Policy Goals and the Duration and Incidence of Unemployment

The costs associated with sustained unemployment might be justified if there was an agreed collective economic goal, such as low inflation, that was deemed to require a particular rate of unemployment. Under these conditions, a consensus would be needed over the sharing of the costs of the higher rate of unemployment. Further, prior to imposing a higher rate of unemployment, other methods of maintaining price stability should be subjected to a cost- benefit analysis. For example, would a comprehensive incomes policy be a less expensive option for inflation control?

The evidence on the duration and incidence of unemployment would suggest that these costs have not been shared equitably. In 1966, the average duration of unemployment was 3 weeks. In the last two decades, it has ratcheted upwards and currently stands at 52.4 weeks (May 2000) - see Figure 1. If the incidence of unemployment was equally shared, the current rate of 6.7 per cent (May 2000) would translate into an average duration of 3.5 weeks.

The maldistribution of jobs across families also confirms that the burden of unemployment is not equally shared. In February 1998 about 25.1 per cent of families had no family member employed, which represented an increase from 22.7 per cent in February 1988. Over the decade, the percentage of these families with one or more dependants rose from 30.7 to 32.8. Of the families with one or more dependants, the percentage with no parent working rose from 13.1 to 16.2. On the other hand, over the decade, the percentage of this group with both parents employed rose from 42.1 per cent to 44 per cent. Thus there is evidence of a polarisation in the distribution of employment opportunities across families, with an increased percentage of families with dependants having either no parent or two parents working (see Dawkins 1996: 280). The decline in the employment to population ratios by age for males has contributed to this polarisation, since the spouses of unemployed men are unlikely to secure employment (Freeland 1997: 27). In addition, there is now alarming evidence emerging that unemployment is being inherited across generations with youth unemployment being much higher in households where no person is employed (OECD, 1996).

Figure 1 Unemployme nt Rate and Average Duration of Unemployment, June 1980-May 2000



There is also significant variation in unemployment rates across cities. For example in March 2000, Fairfield experienced an unemployment rate of 11.3 per cent whereas in the Sutherland Shire it was 1.9 per cent (Department of Employment, Workplace Relations and Small Business, 2000). This signifies a trend towards increasing polarisation of income and employment opportunities across regions and even suburbs (Gregory and Hunter, 1995).

Some economists view unemployment as the outcome of voluntary choice made in response to generous unemployment benefits, excessive wage expectations, idleness or lack of motivation of the unemployed (see Moore, 1997).[1] In this case the direct economic costs of unemployment would be relatively small, unless the associated externalities, such as crime and family breakdown, were significant.[2] Despite the difficulty in measuring vacancies, the persistently high ratio of unemployment to vacancies would suggest that a significant proportion of unemployed workers are involuntarily unemployed.[3] Further, the tightening of the activity test by the Howard Coalition Government has not led to a dramatic reduction in the official rate of unemployment.

3. The Costs of Unemployme nt

3.1 Introduction

The majority of commentators agree that sustained unemployment imposes significant economic, personal and social costs that include (see Sen, 1997, and Junankur and Kapuscinski, 1992):

- ?? loss of current output;
- ?? social exclusion and the loss of freedom;
- ?? skill loss;
- ?? psychological harm;
- ?? ill health and reduced life expectancy;
- ?? loss of motivation;
- ?? the undermining of human relations and family life;
- ?? racial and gender inequality; and
- ?? loss of social values and responsibility.

These costs of unemployment are documented in more detail below, and, where possible, quantified. They are based on the economic circumstances prevailing in September 1998.

3.2 Output Loss

Initially, economists usually focus on the foregone output resulting from unemployment and underemployment. A number of conceptual and empirical issues arise. First, the choice of the target rate of unemployment is important (see Junankur and Kapuscinski, 1992: 23). The chosen rate of unemployment must reflect estimates of frictional and any obdurate structural unemployment. Hamilton and Saddler (1997) estimates that the frictional unemployment rate is 1.7 per cent, reflecting the rate of unemployment in the 1950s and 1960s. We use the figure of 2 per cent.

Second, Mitchell and Carlson (2000) have shown that the aggregate labour force participation rate is pro-cyclical even though some age-gender groups do not exhibit any cyclical sensitivity. The overall result reflects workers' beliefs that there is a higher probability of securing a job in a buoyant labour market. Thus the computation of the required additional jobs to achieve the target unemployment rate must include an estimate of hidden unemployment (HU). Mitchell and Carlson (2000) estimate that the increase in participation associated with the target unemployment rate of 2 per cent is consistent with a level of hidden unemployment (HU) of approximately 349.1 thousand, computed at the rate of unemployment prevailing in August 1998 (see Table 1). Thus to achieve an unemployment rate of 2 per cent requires NJ new jobs where NJ = 0.98(LF + HU) - N = 914.4 thousand and LF, N denote the prevailing labour force and employment, respectively. The bracketed term represents the potential labour force.

Approximately 77.5 per cent of unemployed workers were seeking full-time employment in September 1998. A majority of the hidden unemployed are women (66.8 per cent) who have a lower propensity to seek full-time employment (64.8 per cent as compared to 86.6 per cent for men). The weighted propensity to seek full-time employment amongst the hidden unemployed is calculated to be 72 per cent.

A further correction has to be made for part-time/full-time hours split. In August 1998, part-time employees worked an average of 15.6 hours per week and fill-time employees 42 hours per week. Using these figures, the number of full-time equivalent (FTE) jobs required to reduce the official unemployment rate to 2 per cent is estimated to be 775.2 thousand.[4]

Underemployment was treated in the following manner. Of the 2207.3 thousand part-time employees, 207.2 thousand employees searched for full-time employment in the 4 weeks up to and including the

survey week in August 1998. We assume that, on average, they were seeking an extra 26.4 hours per week (average full-time minus average part-time hours). An additional 369.4 thousand part-time workers sought extra hours of work. We assume that these workers were seeking an extra 3 hours per week. This underemployment measured in hours can be translated into full-time equivalent jobs, based on the average of 42 hours per week. It can be readily shown that underemployment can be represented by the equivalent of 156.6 thousand full-time equivalent jobs. Then the total number of additional full-time equivalent jobs required to reduce the rate of unemployment to 2 per cent and remove underemployment is 931.9 thousand.

Nominal Gross Domestic Product for the year ending June 1998 was $565,881m and with average full-time employment of 6330.8 thousand and part-time employment of 2,170.7 thousand. Then average full-time equivalent employment over the year ending June 1998 was 7,137 thousand. Thus annual productivity per full-time equivalent employee was about $79,000. The ratio of GDP at factor cost to GDP at market price for the September 1998 quarter was 0.891.

Table 1: The Underlying Parameters

The Labour Market September 1998			
Official Unemployment (000s)	762.3	Unemployment Rate (%)	8.0
Labour Force (000's)	9,499.6	% of Unemployed Seeking Full-Time	77.5
Average FT Hours Per Week	42.0	Average PT Hours per Week	15.6
PT seeking FT employment (000s)	207.2	PT seeking more hours of work (000s)	369.4
Labour Market with 2 per cent Unemployment ('000s)			
Hidden Unemployment (2 per cent U)	349.1	New Jobs for (Hidden) Unemployed	914.4
Hidden unemployed who secure jobs	287.2	Official unemployed who secure jobs	627.2
FTE Underemployment	156.6		
Annual Output, Wages & Productivity			
GDP at Factor Cost/GDP	0.891	On-Costs Public Sector	0.2
Private Sector Productivity per annum	$40,000	Public Sector Productivity per annum	$30,000
Private Sector Wage per annum	$26,000	Public Sector Wage per annum	$20,800
Disposable Income and Consumption			

Tax Rate ($5,400 - $20,700)	40.2	MPC out of Wages	0.6
Tax Rate (>$20,700)	0.34	MPC out of Profit	0.4
Tax rate on Profit	0.35		

The level of foregone output associated with the prevailing level of unemployment and underemployment is proxied by a direct measure of output per worker, that is in turn, multiplied by the number of additional employees.[5] We assume that the productivity of the newly employed full-time equivalent workers in the private sector is $40,000, reflecting the lower skills of the unemployed and possible capital shortages resulting from the higher level of economic activity. Then if 2 per cent unemployment were to be achieved by an exclusively private sector recovery, along with the removal of all underemployment, the increase in output would be approximately $37.3 billion that is about 6.6 per cent of nominal GNP.

In its 1991-92 Annual Report, the Industry Commission initially estimated that the annual cost associated with microeconomic inefficiency was $22 billion, but they now appear to be less committed to this figure (Mitchell and Watts, 1997: 437-438; Quiggin, 1997). In any case the static cost of income (output) losses dwarf the estimates of losses associated with microeconomic inefficiency, even if the estimated costs of microeconomic inefficiency have increased by 25 per cent say since 1991-92. Langmore and Quiggin (1994: 28) estimated that, after taking into account the hidden unemployed, the static costs of income loss lay in the range of $30-$40 billion per year. Thus there is persuasive evidence that the macroeconomic costs of unemployment, as measured by foregone output, dominate the costs of microeconomic inefficiency. This comparison ignores all the other costs that are associated with unemployment. Further it is not apparent that microeconomic reform will cause a significant reduction in unemployment. Thus direct, macroeconomic intervention is justified.

Finally, taking account of the cumulative costs of sustained recession, Langmore and Quiggin (1994: 28) note that if the more rapid growth of GDP per head over the period 1960-73 had been sustained, national income would have been nearly 50 per cent higher in the early 1990s. These calculations reflect the dynamic costs of unemployment, because they pick up the loss of future output arising from the reduced human and physical capital stock due to skill atrophy and the lower investment in the physical capital stock (Junankur and Kapuscinski, 1992: 24; Denniss and Burgess, 1999). Sen (1997b) suggests that high unemployment can also impede technical change, because the incentive to adopt labour-saving technologies is reduced in the presence of plentiful, cheap labour.

3.3 Individual and Social Costs

The pecuniary costs of unemployment that are borne by individuals are normally represented by the replacement ratio which is the ratio of the level of unemployment benefits net of tax and any costs associated with job search to net income from work, where the latter is adjusted for the costs of commuting, work uniform and taxation. Thus it measures the extent to which the system of unemployment benefits compensates for the loss of work income.[6] Its low level signifies the shift away from the Keynesian welfare state to a policy regime that no longer proclaims the ideals of full employment and the universal safety net (Burgess, Mitchell, O'Brien and Watts, 2000). Policy makers clearly view unemployment as an individual problem, not a collective one, which is consistent with the shift to a market-based view of economic life.

Junankur and Kapuscinski (1992: 51) note that the replacement ratio is non-unique, because it depends on the underlying system of tax system of taxation and factors including the level of work income marital status and number of dependents. A calculation based on the replacement ratio and the level of unemployment would ignore the pecuniary costs of the hidden unemployed. One estimate of the pecuniary costs of unemployment for individuals would be the net increase in post-tax wage income associated with full employment or 2 per cent unemployment. This is estimated to be $15.8 billion.[7]

The replacement ratio, while measuring the immediate loss of income from unemployment, fails to indicate the long-term potential loss of income from a sustained spell of unemployment. For example, an individual's long term capacity to secure employment (Junankur and Kapuscinski, 1991) and income (Bradbury, Ross and Doyle, 1990) is often reduced by a period of unemployment and/or if benefits are only available for a limited period. This is especially problematic because prolonged joblessness can lead to a loss of skills and a general decline in the ability to perform at work.

In a US study, Darity and Goldsmith (1993) show that exposure to unemployment and even underemployment impairs an individual's self-confidence and sense of control. Rather than increasing her/his effort to overcome unemployment, the person will progressively reduce efforts to re-enter the work force through reduced intensity and persistence of search and a reduced motivation to acquire skills that might improve the prospects for re-employment. This decline in motivation not only impairs the capacity to search for employment in the future, but will also reduce subsequent job performance

through reduced cognitive efficiency, the depreciation in human capital and the increase in underlying stress, if the individual does return to work (Darity, 1999).

These economic costs contribute to the non-pecuniary costs to individuals of unemployment through their social exclusion, resulting from the loss of social and professional contacts in the workplace (Sen, 1997b; Darity, 1999), that can undermine self-esteem, along with psychological problems, including stress and loss of self worth and medical problems, which can be linked to lifestyles, involving poor diet and/or excessive consumption of alcohol (Junankur and Kapuscinski, 1992).

Burgess and Mitchell (1998) note that the human rights of the unemployed are undermined by their loss of freedom. Without access to labour income they are forced to rely on social and/or family transfers, non-labour income or savings. Many unemployed people do not have access to these sources of support thereby limiting their ability to participate in the market economy. It restricts choices over lifestyles, personal development and access to basic goods and services.

The adverse consequences of unemployment not only impact on the victims, but also on their families and the rest of the community. Unemployment has been linked to truancy and non-completion of schooling, family break up, spouse abuse, substance abuse, alienation, discrimination, illness and premature death, and poverty (Siegel, 1994: 8).[8] Junankur and Kapuscinski (1992: 57) show that higher unemployment tends to reduce the incidence of marriage and raise the rate of divorces.

Burgess and Mitchell (1998) note that social and economic exclusion encourages anti-social behaviour and fosters the growth in illegal activity as a means of generating income (see also Darity, 1999). Unemployment is unevenly distributed across regions and within cities, with the unemployed tending to congregate in areas of cheap housing. Further, the incidence of youth unemployment appears to be related to the labour market status of their parents.

Finally, increasing fiscal conservatism by governments, combined with a prevailing attitude that unemployment benefits are a privilege rather than a right, has led to the financial pressures on the unemployed intensifying and to gaps emerging in the welfare system. In Australia, there has been the tightening of eligibility conditions for benefits, the abolition of the youth unemployment benefit and the introduction of work for the dole programs for unemployed people (Biddle and Burgess, 1998; Burgess,

Mitchell, O'Brien and Watts, 2000) that may be extended to single parents on benefits and disabled pensioners.

Sen (1997b) argues that high unemployment contributes to jingoism as well as to inter-racial or inter-ethnic tensions. Social cohesion also can erode under the pressure of rising unemployment. Galbraith (1998: 133-149) argues that unemployment increases the general degree of income inequality in most societies (see also Sen 1997b: 164).

4. The Arithmetic of the Job Guarantee

4.1 Employment Generation

Mitchell (1998) argues that, if the private sector does not provide sufficient job opportunities to achieve full employment, then the government should guarantee a full-time or part-time job to everyone who desires one at the living wage level. The Job Guarantee is designed to generate both full employment and price stability.[9] There are many unfulfilled needs that could be met by Job Guarantee workers including environmental restoration, community services to the aged, the youth, and the disabled, and other similarly useful activities. Local councils have the knowledge and expertise to identify pressing social needs and employment agencies could readily establish the extent of idle labour. Such a program will generate a high rate of social return on public expenditure (see Watts and Mitchell, 2000 for a more detailed discussion of the philosophy of the JG).

The creation of public sector jobs is assumed sufficient to reduce the unemployment rate to 2 per cent, so that a total of 775.2 thousand extra full-time equivalent jobs are created. We shall assume that these jobs are distributed pro-rata between the official unemployed and those workers who constitute the hidden unemployed at the prevailing unemployment rate, but participate in the labour market at 2 per cent unemployment. In addition, the extra 156.6 thousand FTE jobs, reflecting the level of underemployment, are treated as equivalent to the jobs being taken by the hidden unemployed, in the sense that no social welfare payments are being foregone with the extra hours of work being undertaken by these workers.[10] If we consider 100 new public sector jobs, then it is possible to estimate the number of PT and FT jobs being taken by the hidden unemployed and the official unemployed. Each full-time (part-time) employee under the JG Program is assumed to be paid $400 ($200) per week. It is possible to

calculate the increases in disposable income associated with securing a public sector job for those persons registered as unemployed and for those who were hidden unemployed.

This extra disposable income will reflect the extra gross income and the prevailing tax rate. We now need to compute the multiplier effect resulting from the creation of public sector jobs. It is assumed that the domestic marginal propensity to consume out of wage income is 0.6. The resulting increase in consumption gives rise to increased private sector employment, the magnitude depending on the level of private sector productivity per worker. The increase in private sector employment is also spread pro-rata across the hidden and official unemployed by part-time and full-time status. The average full-time adult private sector wage was $752.50 per week in 1998. We assume that the full-time wage of the newly employed is $500 per week. It is then possible to calculate the increase in disposable income of these private sector wage earners arising from the first round increase in consumption.

The production of consumption goods is also a source of profit. The ratio of GDP at factor cost to GDP in 1997/98 was 0.891. Then the level of profit per full-time worker is $9,640 that is subject to a tax rate of 35 per cent. It is assumed that marginal propensity to consume out of profit is 0.4. Then it is possible to compute the successive rounds of consumption expenditure, resulting from the initial increase in public sector employment. It is estimated that an initial creation of 100 public sector jobs leads to an additional 28.6 private sector jobs. Then, scaling up these figures, the number of public sector jobs that are required to achieve a 2 per cent unemployment rate and no underemployment is 858.7 thousand.

4.2 Government Outlays and Revenue

We have shown that, based on the September 1998 figures, a fall in unemployment to 2 per cent requires an extra 1.105 million jobs of which 627.2 thousand are filled by workers currently registered as unemployed who were receiving unemployment benefit of $160 per week (the single person rate). The saving in unemployment benefits is about $5.2 billion. New employees who are undertaking public sector jobs are paid a full-time wage of $400 per week, and full-time private sector employees are being paid $500 per week. The increase in income tax revenue is $2.83 billion and reflects the initial status of workers, their full-time versus part-time employment status and their distribution between the public sector and private sector. Expenditure on labour market programs, in the form of assistance to job seekers and industry, over the year 1997-98 was $1.94 billion. If unemployment fell to a frictional level

of 2 per cent, then most of these programs could be terminated. We allow $940 million for retraining and the provision of improved communications to assist the dissemination of information about job vacancies and the characteristics of the unemployed, so that outlays are reduced by a modest $1 billion.

Outlays on unemployment and sickness benefits were $7.5 billion and invalid and permanent disablement benefits were $5.8 billion over the year 1997-98 (ABS 5212.0). Langmore and Quiggin (1994: 29) argue that much of the increase in sickness benefits and disability support pensions can be attributed to unemployment. They estimate that about half of these recipients are people could undertake employment if jobs were available. We shall use the figure of 25 per cent that yields a saving of $1.45 billion.[11]

Finally the costs of unemployment are felt in most areas of government, including police, community welfare and health services. The outlays on public law and order and safety and health were $1.14 billion and $20.7 billion, respectively in 1997-98. The rate of unemployment of 8 per cent is assumed to contribute 20 per cent to public law and order expenditure and 10 per cent to safety and health expenditure. There is insufficient provision by government of health and safety and law and order services at present, however, so that, rather than considering cuts in outlays of this magnitude, we assume that the *effective* level of service provision is increased at full employment by maintaining the level of expenditures.[12]

Table 2 The Jobs Guarantee: 2 per cent unemployment

? Income, Spending ($b) and Employment (000s)		? Government Outlays/Revenue ($b)	
? GDP	30.6	? Gross Government Outlays	18.77
? Consumption	8.4	? Unemployment Benefits	-5.20
? Profit	2.0	? Outlays on LM Programs (52%)	-1.00
? Employment	1,104.5	? Outlays on Disability (25%)	-1.45
? Public Sector Employment	858.7	? Taxes on Wages	2.83
? Private Sector Employment	245.7	? Taxes on Profits	0.71
? FTE Employment	931.9	? **Net Government Outlays**	**7.56**

Hence, based on these figures, achieving full employment, defined as 2 per cent unemployment, would net the government about $11.21 billion, through significant direct and indirect savings in employment assistance, unemployment (but sickness excluded) benefits, invalid and permanent disablement benefits, and through increased tax revenue (see Table 2). This figure is a similar order of magnitude to the estimates of Langmore and Quiggin (1994: 29) of savings on direct outlays of about $12 billion in 1992-93. Thus net government outlays required to reduce the rate of unemployment to 2 per cent are estimated to be in the order of $7.56 billion.

The cost would vary with the fluctuations in private sector employment. In the context of the current budget surplus (over $12 billion at October 2000), the cost of the Olympics ($8 billion), the corporate welfare handouts to private companies (about $6 billion per year), and the tax cuts given to the high income groups to accompany the GST ($6.5 billion), the estimated cost of the Job Guarantee makes it a realistic policy option.[13]

The returns of having everyone in meaningful employment would be substantial. However, given the budget surplus fetishism of the current Coalition Government, a Job Guarantee would be considered excessive. A more reasoned policy approach would be to compare the costs of the Job Guarantee relative to its overall benefits, which include restoration of community values, to the costs and benefits of other major government programs. For example, a candidate for significant fiscal cuts would be corporate welfare that has netted the private sector approximately $60 billion over the last 10 years in the form of direct outlays and tax breaks (Verrender and Burrell, 1999). Despite the increased accountability that is required of welfare recipients, the corporate sector appears to be largely immune to the requirement for *any* form of evaluation. Large players in the corporate sector are able to demand significant inducements from both Federal and State governments to locate their operations in the appropriate area (Mitchell, 1995). 'Competitive smokestack chasing' reaches the height of absurdity when State Governments compete for business from multi-nationals through generous incentive programs. The most recent example is Richard Branson's Virgin Airlines that has located its branch operations in Queensland.

5. Conclusion

The paper has demonstrated that, even under conservative assumptions about parameter values, the economic and social costs of sustained high unemployment are extremely high. The inability of unemployed individuals and their families to function in the market economy gives rise to many forms of social dysfunction, in addition to output loss. The apparent failure of neo-liberal supply side policies to reduce unemployment and the modest benefits of microeconomic efficiency points to the need for demand management policies. If the Government had the political will, it could readily overcome the problem of persistently high unemployment.

The arithmetic of the Job Guarantee program demonstrates that the costs to government of unemployment are not in our view substantial. If full employment was to occur through a private sector recovery, then a substantial improvement in the effective level of government services could be achieved and the increase in tax revenue would be even greater than shown in Table 2, due to higher wages in the private sector.

These calculations have also shown that, under conservative assumptions about spending propensities, the net increase in government outlays to achieve a fully employed economy under a JG program is relatively small. Given the budget surplus fetishism of the current Coalition Government, a significant cut in Commonwealth Government outlays would be required. One candidate would be corporate welfare. However many economists now challenge the long-term viability of persistent budget surpluses (see for example Watts and Mitchell, 2000 and references therein).

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[1]The onus is on Moore and his fellow researchers to provide evidence as to why personal characteristics such as 'excessive wage expectations, idleness or lack of motivation of the unemployed' tend to be consistently associated with specific economic characteristics of groups of workers, such as age and education, predisposing them to exhibit higher or lower rates of unemployment. A more plausible explanation is that employers rank their employees and prospective employees according to their education and past employment experience.

2 In this case, the assumption of rationality underpinning the decision not to work would be questionable.

3 Even if 50 per cent of unemployment were voluntary, the ratio of unemployment to vacancies would still be in the order of 5 to 1.

4 Each part-time job is given a weight of 0.3714 in the computation of full-time equivalent employment, reflecting the respective number of hours worked by part-time and full-time workers, see Table 1.

5 In the income method it is assumed that the wage reflects the additional output produced by a newly employed worker.

6 Quoting from the OECD (1997), Lombard (1998: 69) notes that the income replacement ratio, defined as the unemployment benefit for a single earner household as a fraction of average production worker's earnings, was 34% in Australia in 1994, compared to the OECD average of 55% and 74% in the Netherlands.

7 Inclusion of this foregone income could be argued to represent double-counting, since foregone output, which includes the increased consumption of the newly employed, is already measured.

8 In their study of mortality rates in 30 U.S. cities, Merva and Fowles (1992) revealed that rising unemployment between 1990 and 1992 was responsible for significant increases in morbidity and mortality.

[9] See Mitchell (1998) for an account of the in-built inflation control associated with the Job Guarantee policy.

10 This simplification avoids taking into account the distribution of the underemployed between the public and private sectors, the marginal tax rates on extra hours worked by these incumbent workers and the complexities involved in computing the impact of the increased hours of employment on the multiplier process.

11 Those persons on disability pensions who seek employment when jobs are available are assumed to be measured as part of the hidden unemployed. The gross increase in income from employment has been used in the calculations, rather than netting out the loss of these pensions.

12 Also it would be necessary to incorporate the impact of cuts in employment of health service professionals and police, if the same effective level of service was to be maintained.

[13] It should be noted that Mitchell (1998) and Wray (1999) argue against the Job Guarantee being measured as a cost to the budget. They say that the budget deficit should not be a target of policy makers and should instead be allowed to vary endogenously. At the heart of their analysis is the criticism of economists who draw an analogy between the household spending and financing decisions and the spending constraints on government. They argue that Federal government spending is not constrained and hence reject the major findings in the government budget constraint literature. According to their argument the existence of unemployment signifies that the budget deficit is too low. In this context, arguments about whether $7.6 billion is too high or a feasible amount to add to the budget deficit are irrelevant.