

16. The job guarantee: full employment and price stability in a small open economy

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1. INTRODUCTION

High and persistent unemployment has pervaded almost every OECD country since the mid-1970s. The period of rising unemployment began with the rapid inflation of the mid-1970s. The inflation left an indelible impression on policy makers who became captives of the resurgent new labor economics and its macroeconomic counterpart, monetarism. The goal of low inflation led to excessively restrictive fiscal and monetary policy stances by OECD governments driven by a false analogy between the household budgetary constraints and government budgetary constraints (Mitchell, 1996, 1998). This has resulted in rising labor productivity combined with GDP growth in OECD countries that is generally below that necessary to absorb the growth in the labor force.¹

Ultimately, mass unemployment arises because the government budget deficit, relative to the desires of the private sector to meet its tax obligations, is too small to save and to hold money for transactions purposes. It is thus a macroeconomic phenomenon and can never be a 'real wage' problem as Keynes noted many years ago. The solution to this problem is for government to use deficit spending to introduce a Job Guarantee policy that can simultaneously achieve full employment and price stability (Mitchell 1996, 1998).² The Job Guarantee approach to full employment opposes the current policy directions of governments in the OECD economies that emphasize fiscal consolidation and supply-side reforms like deregulation and privatization.

The fallacious analogies that government spending, taxation and debt issue is equivalent to the spending and financing decisions of the household and that governments, like households, should seek financing prior to spending has led to the pursuit of budget surpluses in order to avoid the higher tax and interest rates that would allegedly arise. Reemerging free-market ideology has

convinced us wrongly that government involvement in the economy imposes costs, and we have thus supported governments that have significantly reduced their fiscal involvement in economic activity.

Economies that avoided the plunge into high unemployment over this period maintained a 'sector of the economy which effectively functions as an employer of the last resort, which absorbs the shocks which occur from time to time ...' (Ormerod, 1994: 203). The Job Guarantee policy fulfills this absorption function. In this chapter some features of the Job Guarantee approach to full employment and price stability are developed (see Mitchell, 1996, 1998, 1999a, 1999b, 2000a). Under the Job Guarantee approach, the government continuously absorbs workers displaced from private sector employment. The Job Guarantee workers serve as a 'buffer stock' of labor being paid the minimum wage that sets a wage floor for the economy, thus preventing the occurrence of serious deflation and defining the private sector wage structure. Government employment and spending automatically increases (decreases), as jobs are lost (gained) in the private sector. We will demonstrate that this policy approach generates full employment and price stability. Specifically we contrast the inflation control mechanisms of the Job Guarantee model with those in an economy subject to a NAIRU.³ The concept of the Non-Accelerating Inflation Buffer Employment Ratio (NAIBER) first developed in Mitchell (1998) is explained further.

There are two broad ways in which government can maintain price stability: first, it can adopt the NAIRU approach by suppressing the budget deficit and generating unemployment; second, it can conduct a Job Guarantee policy whereby the public sector, setting and maintaining a base level wage, absorbs all the current idle workers into paid employment. The relevant price stability concept is the NAIBER.⁴ The change in the buffer employment ratio (BER)⁵ disciplines the wage-price pressures in the private sector by asserting the buffer stock wage as the numeraire.⁶ No rational government with an understanding of the workings of its own currency works and the role of the budget deficit would choose the NAIRU approach with its enormous costs of lost output and social alienation.⁷

This chapter also considers the financial implications of the Job Guarantee model in the context of a small open economy. In addition to the normal arguments that monetarists and others use to justify their case against fiscal activism (crowding out, inefficient resource usage), it is often argued that increased globalization imposes further restrictions on the ability of governments to pursue independent fiscal and monetary policy. In the case of Australia, it is alleged that budget deficits only result in growing current account deficits and rising debt levels. Reacting to this, it is asserted that external funds managers can enforce higher interest rates leading to even lower growth and higher unemployment in the domestic economy. It is shown that

all the orthodox arguments against the use of budget deficits are spurious and not founded on any firm empirical evidence.

The outline of the chapter is as follows: Section 2 briefly explains the motivation that led to the development of the Job Guarantee approach to full employment and price stability; Section 3 compares and contrasts the inflation control mechanisms of the NAIRU and the Job Guarantee approaches; Section 4 considers the financial considerations. Concluding remarks follow.

2. THE DEVELOPMENT OF THE JOB GUARANTEE APPROACH

In Australia, despite the paradigm shift in macroeconomics from Keynesian demand management to the monetarist supply-side approach, empirical evidence still supported the use of expansionary fiscal and monetary policy and public sector job creation (for example, Mitchell, 1987a, 1987b, 1994, 1996; Mitchell et al., 1995). The solutions proposed, however, relied heavily on income policy guidelines and were not, in retrospect, comprehensive enough. Further, the stimulus that would be forthcoming was not conceived to be adequately focused to support environmental sustainability, a goal usually ignored in orthodox macroeconomics. In this context, the Job Guarantee reflects work that was conceived when this author was a fourth-year student at the University of Melbourne in the late 1970s.

The logic of the policy was suggested by a series of lectures on the Wool Floor Price Scheme introduced by the Commonwealth Government of Australia in November 1970. The relatively simple scheme worked through government hearing submissions from the Wool Council of Australia and the Australian Wool Corporation (AWC) to establish a floor price for wool. The government then guaranteed that the price would not fall below the level established. There was a lot of lobbying to get the floor price above the implied market price. The price was maintained by the AWC's purchase of stocks of wool in the auction markets. The purchases were financed from a Market Support Fund (MSF) accumulated through small contributions from growers based on the value of its clip. Fund shortages were made up with government-guaranteed loans. For economists, the major controversy was an issue as to whether the 'tinkering with the price mechanism' was price stabilization or price maintenance (Throsby, 1972: 162). This was not unimportant in a time when prices were in sectoral decline and a minimum guaranteed floor price implied ever-increasing AWC stocks. Other problems included the pressure of substitutability from synthetic fibers and the maintenance of production levels, which by themselves would continue to depress prices. The debate over the scheme (adequately summarized by Parish, 1964; and Lloyd, 1965) focused on the price intervention.

By applying reverse logic, one could utilize the concept without encountering the problems of price tinkering. In effect, the Wool Floor Price Scheme generated 'full employment' for wool production. Clearly, in the wool situation, there was an issue as to what constituted a reasonable level of output in a time of declining demand. But the same argument is not relevant when applied to available labor. We define full employment to be the state of no involuntary unemployment ensured by a sufficient number of available jobs in relation to the labor supply at current money wage rates. This amounts to a rejection of the notion that all unemployment is voluntary. It also contradicts the idea that full employment can be defined by market relations, the intersection of the labor demand and supply curves at some 'equilibrium price' (for example, Phelps, 1967; Friedman, 1968). Accordingly mass unemployment is construed as a macroeconomic problem related to deficient demand, which in turn reflects a deficient budget deficit.

The reverse logic noted above implies that we should impose a price guarantee below the 'prevailing market price' and generate a buffer stock of working hours to absorb the excess of working hours at the current market price. This will generate full employment without the problems of price tinkering. That idea was the seed of the Job Guarantee model.⁸

The work of Benjamin Graham (1937) is also instructive. He discusses the idea of stabilizing prices and standards of living by surplus storage. He documents the ways the government might deal with surplus production in the economy. Graham (1937: 18) says, 'The State may deal with actual or threatened surplus in one of four ways: (a) by preventing it; (b) by destroying it; (c) by "dumping" it; or (d) by conserving it.' In the context of an excess supply of labor, governments had adopted a 'dumping' strategy via the NAIRU. It made much better sense to use the conservation approach. Graham (1937: 34) notes:

The first conclusion is that wherever surplus has been conserved primarily for future use the plan has been sensible and successful, unless marred by glaring errors of administration. The second conclusion is that when the surplus has been acquired and held primarily for future sale the plan has been vulnerable to adverse developments.

The distinction is important in the development of the Job Guarantee model. The Wool Floor Price Scheme was an example of storage for future sale and was motivated not to help the consumer of wool, but the producer. The Job Guarantee policy is an example of storage for use where the 'reserve is established to meet a future need which experience has taught us is likely to develop' (Graham, 1937: 35). Graham also analysed and proposed a solution to the problem of interfering with the relative price structure when the government built up the surplus. In the context of the Job Guarantee policy, this means setting a buffer stock wage below the private market wage structure,

unless strategic policy, in addition to the meager elimination of the surplus, was being pursued. For example, the government may wish to combine the Job Guarantee policy with an industry policy designed to raise productivity. In such a case it may buy surplus labor at a wage above the current private market minimum. In the first instance, the basic Job Guarantee model with a wage floor below the private wage structure shows how full employment and price stability can be attained. While this is an eminently better outcome in terms of resource use and social equity, it is just the beginning of the matter.

Graham (1937: 42) considered that the surplus should 'not be pressed for sale until an effective demand develops for it.' In the context of the Job Guarantee policy, this translates into the provision of a government job for all labor, which is surplus to private demand until such time as private demand increases.

3. THE JOB GUARANTEE AND INFLATION

In this section we focus on inflation control and show that the Job Guarantee, able to simultaneously generate full employment and price stability, is superior to the current NAIRU approach, which uses unemployment to maintain inflation control. Broadly, there are three options available to an economy that desires price stability. First, as in the NAIRU approach, it can use unemployment as a tool to suppress price pressures. Second, it can introduce a Job Guarantee and use movements in the Buffer Employment Ratio (BER) to control inflation. Third, it can introduce the Job Guarantee policy and augment it with an incomes policy. We do not consider this third option.

3.1 The Role of Unemployment in Inflation Control

The OECD experience of the 1990s shows that high and prolonged unemployment eventually results in low inflation (Mitchell, 1996). There are several observationally equivalent theoretical explanations for the inflation-unemployment trade-off. The orthodox explanations center on the role of the NAIRU and the requirement that to lower unemployment the government must run agent expectations ahead of the actual data. Each time the agents are tricked into mistaking a nominal price change for a relative price change, the inflation rate rises. Ultimately the only sustainable non-inflationary unemployment rate occurs when expectations are realized, a condition immutable to aggregate policy manipulation.

Alternatively, Post-Keynesians and others locate the trade-off on a model of conflicting claims among capitalists and workers to real income. Sawyer (1985: 17) argues that unemployment acts as a 'control mechanism, albeit a

socially and economically inefficient one.' By disciplining the aspirations of labor to be compatible with the profitability requirements of capital, unemployment can temporarily balance the conflicting demands of labor and capital (Kalecki, 1971). Similarly low product market demand, the analogue of high unemployment, suppresses the ability of firms to pass on prices to protect real margins. The lull in the wage-price spiral, in the sense that inflation is stable, could be termed a macroequilibrium state. The implied unemployment rate under this concept of inflation is termed the macroequilibrium unemployment rate (MRU) by Mitchell (1987a) and has no connotations of the voluntary maximizing individual behavior that underpins the NAIRU concept. Mitchell (1987a) develops this concept into an explanation of hysteresis.⁹

The fact that at some stable inflation rate there is an associated unemployment rate, and that increases in the latter ensure the former, does not provide a theoretical reason for income distribution conflicts between powerful groups in the economy. We might also call this unemployment rate the NAIRU, but in doing so we add nothing to the understanding of the inflation process. Clearly different theoretical underpinnings support this observation, each theoretical structure bringing with it an entirely different comprehension of the role of the NAIRU and its implications for activist government agendas designed to provide full employment.

3.2 Inflation Control – the NAIBER

To demonstrate how the Job Guarantee generates full employment with price stability, let us consider two situations: (a) introducing the Job Guarantee into a NAIRU economy with high unemployment; (b) maintaining the Job Guarantee in the fully employed economy subject to inflationary biases in the private sector. Initially we outline the relationship between falling unemployment and inflationary pressures in a NAIRU economy.

We consider a stylized economy with a dual labor market where the sectors are differentiated by their wage-setting mechanisms. Prices are set according to markups on unit costs in both sectors. Wage-setting in Sector A is contractual and responds in an inverse and lagged fashion to relative wage growth (A/B) and to the wait unemployment level (displaced workers who think they will be re-employed soon in Sector A). Wages are relatively flexible upwards in Sector B and respond immediately. A government stimulus to this economy increases output and employment in both sectors immediately. The compression of the A/B relative wage stimulates wage growth in Sector A after a time. Wait unemployment falls due to the rising employment in A but also rises due to the increased probability of getting a job in A. The net effect is unclear. The total unemployment rate falls after participation effects are absorbed.

The wage growth in both sectors may force firms to increase prices,

although this will be attenuated somewhat by rising productivity as utilization increases. A combination of wage-wage and wage-price mechanisms in a soft product market can then drive inflation. This is a Phillips Curve world. To stop inflation, the government has to repress demand. Higher unemployment brings the real income expectations of workers and firms into line with the available real income, and inflation stabilizes. This describes the fundamental mechanisms in a NAIRU economy.

What would happen if the Job Guarantee were introduced to solve the problem of unemployment in this economy? For simplicity of argument, we assume the Job Guarantee wage is set at the bottom of the private sector wage structure although not low enough to enforce poverty on full-time workers. If there were poverty level wages being paid in Sector B, then there would be pressure on Sector B employers to restructure their jobs in order to maintain a workforce. The Job Guarantee wage sets a floor in the economy's cost structure for given productivity levels. The dynamics of the economy change significantly. The elimination of all but wait unemployment in Sector A and frictional unemployment does not distort the relative wage structure so that the wage-wage pressures that were prominent in the upturn in the NAIRU economy are now reduced. But the rising demand softens the product market, and demand for labor rises in Sector A. The Job Guarantee introduces no new problems faced by employers who wish to hire labor to meet higher sales levels. They must pay the going rate, which is still preferable to appropriately skilled workers than the Job Guarantee wage level. The rising demand per se does not invoke inflationary pressures as firms increase capacity utilization to meet higher sales volumes.

What about the behavior of workers in Sector A? Wendell Gordon (1997: 833) said, 'If there is a Job Guarantee program, the employees can simply quit an obnoxious employer with assurance that they can find alternative employment.' With the Job Guarantee policy, wage bargaining is freed from the general threat of unemployment. However it is unclear whether this freedom will lead to higher wage demands than otherwise. In professional occupational markets, it is likely that some wait unemployment will remain. Skilled workers who are laid off are likely to receive payouts that forestall their need to get immediate work. They have a disincentive to immediately take a Job Guarantee job, which is a low-wage and possibly stigmatized option. Wait unemployment disciplines wage demands in Sector A. The demand pressures, however, may eventually exhaust this stock, and wage-price pressures may develop.

At first blush it might appear that the BER would have to be greater than the NAIRU for an equivalent amount of inflation control. This is because the Job Guarantee workers will have higher incomes and so a switch to this policy would see demand levels higher than in a NAIRU world. But the Job

Guarantee provides better inflation proofing than does a NAIRU approach because the Job Guarantee workers represent a more credible threat to the current private sector employees. In other words, the Job Guarantee pool is a more effective excess supply of labor.

The Job Guarantee employees are more attractive than when they were unemployed, not the least because they will have basic work skills, such as punctuality, in place. This reduces hiring costs for firms in tight labor markets who would have lowered hiring standards and provided on-the-job training. They can now pay higher wages to attract workers or accept lower costs that would ease the wage-price pressures. The Job Guarantee policy thus reduces the 'hysteresis inertia' embodied in the long-term unemployed and, with growth bottlenecks reduced, allows for a smoother private sector expansion.

A further source of cost pressure comes via the exchange rate for small trading economies like Australia. Under a fixed exchange rate regime, unless there is a coordinated fiscal policy among countries, it would be difficult for a small open economy to pursue its own full employment strategy. With higher spending on imports arising from domestic expansion, the stimulus would spread throughout the fixed exchange rate bloc and the small country would face a borrowing crisis negating its full employment ambitions. It is easy to see that a Job Guarantee model, to be effective, requires a flexible exchange rate. We can identify two external effects. First, given the higher disposable incomes of Job Guarantee workers compared to wages of the unemployed, imports would likely rise. With a flexible exchange rate, the increase in imports would promote depreciation in the exchange rate. The current account could be expected to improve, net exports increasing their contribution to local employment. Final outcomes would depend on estimates of export and import price elasticities. Recent work by Dwyer and Kent (1993) finds that import elasticities are small (around -0.5). Thus, following depreciation, import spending will actually rise because we are paying disproportionately more for fewer imported goods and services. Improvement in the current account thus depends on the estimate of the export elasticity. *State of Play 8* (Indecs, 1995: 125) says, 'Fortunately, this seems to be the case. . . . [T]he supply responses to higher prices are thought to be strong in both agriculture and mining, and the numbers for manufactures are . . . embarrassingly high. . . . There is little objective reason to be worried by elasticity pessimism' (see also Bullock et al., 1993). Vickrey (1996) said, 'The danger of world speculative gyrations under freely floating conditions would be greatly diminished under a well-established full-employment policy, especially if combined with a third dimension of direct control over the overall domestic price level.'

Direct control to allow the depreciation to be insulated from the wage-price system could be an income policy. If the increased spending led to depreciation

through rising imports, a comprehensive incomes policy would be required to reduce inflationary pressures. Workers and firms would have to agree to allow real depreciation to stick, as part of the return to the collective will. For everyone to have jobs, those who are currently employed would have to sacrifice some real income to permit others to increase their claim on it. The scheme itself would not force up labor costs.

The Job Guarantee wage provides a floor that prevents serious deflation from occurring and defines the private sector wage structure. However, if the private labor market is tight, the non-buffer stock wage will rise relative to the Job Guarantee wage, draining the buffer stock pool. The smaller this pool, the less influence the Job Guarantee wage has on wage patterning. Unless the government stifles demand, the economy will then enter an inflationary episode, depending on the behavior of labor and capital in the bargaining environment.

In the face of wage-price pressures, the Job Guarantee approach maintains inflation control by choking aggregate demand and inducing slack in the non-buffer stock sector. As the slack does not reveal itself as unemployment, the Job Guarantee may be referred to as a 'loose' full employment. This leads to the definition of a new concept, the NAIBER, which, in the buffer stock economy, replaces the NAIRU/MRU as an inflation control mechanism. The BER is the ratio of buffer stock employment to total employment.

As the BER rises, due to an increase in interest rates and/or a fiscal tightening, resources are transferred from the inflating non-buffer stock sector into the buffer stock sector at the fixed buffer stock wage. This is the vehicle for inflation discipline. A major advantage of the Job Guarantee approach is that the disciplinary role of the NAIRU, which forces the inflation adjustment onto the unemployed, is replaced by the compositional shift in sectoral employment, the major costs of unemployment thus being avoided. The only requirement is that the buffer stock wage be a floor and that the rate of growth in buffer stock wages be equal to or less than the private sector wages growth.

So far we have analysed the effects likely to accompany the introduction of the Job Guarantee and compared the outcomes to a NAIRU economy. However, there are further issues that arise when we consider the *maintenance* of full employment using the Job Guarantee policy. While orthodox economists typically attack the Job Guarantee policy for fiscal reasons, economists on the left also challenge its validity and effectiveness. Mitchell (2000b), analyses the arguments presented by Michal Kalecki in his 'Political aspects of full employment,' published in 1943 in the *Political Quarterly*, which laid out the blueprint for socialist opposition to Keynesian-style employment policy. A summary of Mitchell's conclusions are useful although more complete detail can be obtained from the above-mentioned publication.

Kalecki (1971: 139) lists three reasons why industrial leaders would be

opposed to a full employment 'achieved by Government spending': first, that the private sector opposes government employment per se; second, that the private sector does not like public sector infrastructure development or any subsidy of consumption; and third, a more general claim involving a dislike by the private sector 'of the social and political changes resulting from the *maintenance* of full employment' (emphasis in original).

Firstly, Kalecki's argument that business leaders fear public spending that might be in competition with their own investment is erroneous, because the Job Guarantee jobs are most needed in areas that have been neglected or harmed by capitalist growth. The chance of overlap and therefore substitution is minimal. Secondly, Kalecki (1971: 140-41) worries that under a regime of permanent full employment, 'the sack' would cease to play its role as a disciplinary measure. However the Job Guarantee creates loose full employment rather than tight full employment because the buffer stock wage is fixed (growing with national productivity). The issue comes down to whether the Job Guarantee pool is a greater or lesser threat to the employed or unemployed when wage bargaining is under way. This is particularly relevant in relation to the significance of the long-term unemployed in total unemployment. It can be argued that the long-term unemployed, because they are not a credible substitute, exert very little downward pressure on wages growth. The Job Guarantee workers, however, do comprise a credible threat to current private sector employees for reasons noted above. The Job Guarantee pool provides business with a fixed-price stock of skilled labor from which to recruit. In an inflationary episode, business, because it can achieve cost control, is more likely to resist wage demands from its existing workforce. In this way longer-term planning with cost control is achievable. In this sense, inflation restraint exerted via the NAIBER is likely to be more effective than using a NAIRU strategy.

4. THE JOB GUARANTEE AND THE BUDGET DEFICIT

The International Labour Office (1999) argues:

[A]ny strategy for full employment must be based on a sound macroeconomic framework. To achieve this, unsustainable current account imbalances, or foreign debt accumulation, must be reduced and low rates of inflation achieved. This requires the continuous adjustment of policies, a realistic exchange rate, fiscal discipline and wage moderation (wage increases in line with labor productivity). But in times of global deflation this is not necessarily sufficient as a guide to policy, and a boost to demand may be needed, perhaps going so far as to generate expectations of inflation, in addition to the accepted policy of balancing budgets over the business cycle as a whole (International Labour Office, 1999).

Critics of the Job Guarantee allege that it relies on sustained budget deficits that are untenable. It is true that the government must allow the budget deficit the necessary increases and decreases to maintain full employment for the Job Guarantee to be viable. In this section, we demonstrate that orthodox arguments advising against sustained budget deficits are unfounded. One of the most damaging analogies in economics is the supposed equivalence between the household budget and the government budget. For example, Barro (1993: 367) has written, '[W]e can think of the government's saving and dissaving just as we thought of households' saving and dissaving.'

This analogy is flawed because it ignores the fundamental difference between the household and government. The household cannot spend before it has sources of finance available (income, savings, borrowing), but must spend to survive. The government, however, can spend without prior financing. Government spending is desired by the private sector because it brings with it the resources (fiat money) that the private sector requires to fulfill its legal taxation obligations. The household cannot impose any such obligations. The government has to spend to provide money to the private sector to pay its taxes, to allow the private sector to save and to maintain transaction balances. Taxation is thus more correctly seen as a vehicle by which the government transfers real resources from the private to the public sector rather than a source of financing for government spending. If people want to save and still be able to pay their taxation obligations in the fiat currency, then there should always be a budget deficit.

The logic, according to those who draw the household analogy, states that to finance the deficit debt would have to be issued. Accordingly bond sales, which will accumulate as debt, finance government. As with a household, rising debt cannot be sustained indefinitely and so spending must be curbed and brought in line with financial reality. In the meantime, demands that debt places on available savings pushes interest rates up and crowds out 'more efficient' sources of private spending. These 'household' logicians divide into two camps. In one camp there are the orthodox monetarists who eschew government debt and advocate balanced budgets. Their wrong-minded logic has imposed extremely high macroeconomic costs in terms of lost growth and high unemployment in the western economies since the mid-1970s. The other camp, which includes some Post-Keynesians, while comfortable with using deficit spending to increase economic activity, couches its recommendations in conservative logic bounded by appropriate movements in the debt to GDP ratio. As long as the ratio is stable there is no problem. For example, the Bank of International Settlements (1994) concluded that a deficit is sustainable as long as the government debt to GDP ratio (hereafter the debt ratio) does not increase permanently. A framework for analyzing the relation between deficits and the debt ratio is provided by Bispham (1988) and Glyn (1997).

But when pushed, there is little difference between the two camps. Glyn (1997: 226), an advocate of expansionary fiscal policy to reduce unemployment, however, seems to abandon that logic when he argues, 'financial markets, the ultimate arbiters of such matters, may look simply at the size of the deficit.' The BIS (1995: 88) concur, 'It is difficult to persuade markets that low inflation is sustainable in the presence of large budget deficits.' Glyn (1997: 227) concludes, 'Given the experience of the past 20 years it would be difficult to convince that increased deficits at the beginning of the expansionary program would be rapidly scaled down as the private sector took up the main thrust of expansion. There seems little alternative to financing through taxation most of an expansionary programme.' Further, Glyn (1997: 224) says '[I]t is misleading to treat them (interest rates) as entirely exogenous. It is likely that beyond a certain level, a higher deficit will lead financial markets to exact a higher real-interest rate.'

The two camps however fail to understand the relationship between fiat currency, public debt and taxation in a monetary capitalist economy, a topic examined by Mosler (1997-98) and Wray (1998). They show the priority of spending and argue that debt issue is not essential for governments to spend beyond tax revenue. Mosler (1997-98) shows that bond issues are essential only to support the cash rates set by the central bank. Deficit spending without Treasury bond sales would generate excess reserves in the banking system, so that government debt helps to maintain a positive overnight interest rate for private banks. Deficits add to the net disposable income of households that provide markets for private production. An endogenous credit economy, then, serves to provide the deposits necessary to make payments, which facilitate production. Higher demand stimulates investment that creates capacity as a legacy to the future. The higher current demand, the higher future productive capacity. Thus spending brings forth its own savings. Savings are not required as a prior pool for spending to occur. The point is clear: When fiat money is used, government spending increases reserves in the banking system. Taxation and borrowing drain the reserves. This gives the clue to the function of borrowing. A deficit generates a net build-up in reserves in the banking system. Spending occurs and private firms and individuals deposit proceeds from selling goods and services to the government in commercial banks, which build up reserves. Unless those reserves are drained from the system, they will earn the official discount rate. The role of the government bond issues is to give these returns a way to earn a return in excess of the discount rate.

William Vickrey (1996: 10) argued, 'The "deficit" is not an economic sin but an economic necessity. Its most important function is to be the means whereby purchasing power not spent on consumption, nor recycled into income by the private creation of net capital, is recycled into purchasing power

by government borrowing and spending. Purchasing power not so recycled becomes non-purchase, non-sales, non-production and unemployment.' In an endogenous money world, there can be no crowding out unless the monetary authority stops lending.

The recent Asian financial troubles and IMF intervention have once again given credence to the view that increasing levels of debt will eventually lead to lenders refusing to take up further public borrowing. Usually this is cast in terms of countries with low levels of capital that have major private debt denominated in a foreign currency used to finance imports. Crises occur when the export revenue, which services the debt, falls for one reason or another. But none of these countries would have any trouble issuing debt in its own currency.¹⁰

To fine-tune this point, government spending would still have occurred if there were no bond issues. The excess reserves would be held somewhere in the banking system earning zero return. If the Treasury offers too few or too many bonds relative to the holders of reserve balances at the Central Bank, the Central Bank 'offsets' those operations to balance the system. In any case, the 'money' is in one account or another at the central bank. We then ask the question – 'Why should government care if the holders of the excess balances choose the one that does not pay interest as opposed to the ones that do (buying bonds)?' – the answer is simple: 'They would be indifferent.'

The Job Guarantee policy also requires that the government have the ability to implement a largely independent monetary and fiscal policy. In this section, we examine the effects of budget deficits on interest rates and current account performance and also seek to establish causality within the term structure of interest rates. As noted above, Glyn (1997: 226–27), an advocate of fiscal activism, believes that taxation should be used to 'finance' necessary spending. He accepts the notion that international financial markets will react to higher budget deficits and 'exact a higher real-interest rate' (Glyn, 1997: 224).

Mitchell (2000a) structured this contention into a set of empirically testable hypotheses:

1. Is there evidence of a relationship between budget deficits and short-term and long-term interest rates? If there is no discernible statistical relationship found, it is difficult to argue against fiscal activism based on financial crowding out arguments.
2. Is there evidence of a relationship between long-term interest rates across countries in globalized financial markets? If there is no relationship detected, then the view that financial traders in the large markets like Japan and the United States can render domestic monetary policy ineffective is problematic.

3. Is there any evidence that the relationship between domestic long- and short-term interest rates is unstable? Stability implies that the cash rate, which is set as a policy instrument, and the longer-term interest rates, which are influenced by market considerations, move together in a proportional manner over the long run.
4. Is there any evidence to support the twin-deficits hypothesis that imposes causality from the fiscal deficit changes to changes in the current account deficit? A lack of such a direct relationship also provides further support for the use of budget deficits under the Job Guarantee policy.

Using a range of econometric testing methodologies, Mitchell (2000a) found no evidence to support any of these contentions. First, it appears that the long-term interest rates in the large markets do not 'cause' enduring movements in the long-term rates in Australia. The evidence appears to support the idea that, after the move to freely determined exchange rates, globalization has led to more independence of long-term rates between Australia and the rest of the world. Second, the yield gap appears to be stationary over a range of time periods. In other words, the difference between domestic long-term and short-term interest rates is stable over time. This is contrary to the view, often alleged by antagonists of the use of activist deficit-based government policy, that Australian monetary authorities are at the behest of global funds managers and are thus unable to pursue their policy objectives. Third, the paired relationships between the cash rate and the medium- and long-term rates in Australia are cointegrated, indicating that, over a long period, there are no systematic departures over a long period between the rates of interest. Fourth, the tests fail to support any notion of causality between changes in the Current Account deficit and changes in the Budget Deficit. Neither direction of causality was detected. Finally, no relationship between changes in the deficit/GDP ratio and changes in the real interest rates could be detected at short or long lags. The evolution of real interest rates appears to be independent of changes in the relative size of the deficit. These results are consistent with those found in the literature for other economies (see Kasman and Rodrigues, 1991; Christiansen and Pigott, 1997).

5. OTHER JOB GUARANTEE CONSIDERATIONS

Issues not dealt with in this chapter but central to the development of the Job Guarantee model and addressed elsewhere include:

- Does the Job Guarantee merely convert the unemployed poor into working poor? (Mitchell, 2000b)

- Is the Job Guarantee just a workfare scheme? (Mitchell and Burgess, 1998a; Burgess et al., 1998).
- Do the Job Guarantee workers do anything useful? How does the Job Guarantee model counter the criticisms that the jobs are make-work and a waste of resources? (Mitchell, 1998).
- Should the Job Guarantee policy replace all safety net welfare payments for the unemployed? Should people be entitled to welfare support in the event that they refuse to take a buffer stock job? (Mitchell, Watts and Burgess, 2000)
- Is the Job Guarantee policy essential to preserve human rights given that the current system deliberately denies a large number of its working-age population employment? (Mitchell and Burgess, 1998b, 1998c)

6. CONCLUSION

We conclude that unemployment is an entirely social construct engineered by humans. There is nothing natural about it at all. The renowned ex-Dominican priest, Matthew Fox, has stated that humans are the only species not to have full employment. Instead of being primarily concerned with how much employment we can derive from using raw materials and energy sources, the dominant concern of capitalism is in maximizing the monetary return on privately owned capital. It seems that this focus results in large numbers of human resources being left idle. As Paul Hawken (1997) says, 'We fire people, perfectly capable people, to wring out one more wave of profits. Some of the restructuring is necessary and overdue. But, as physicists Amory Lovins and Ernst von Weizsacker have repeatedly advised, what we should do is fire the unproductive kilowatts, barrels of oil, tons of material, and pulp from old-growth forests – and hire more people to do so.' The restructuring has been exacerbated by the abandonment of the goal of full employment by governments since the mid-1970s.¹¹

Unemployment arises because the budget deficit is too low. It is always a macroeconomic problem. The Job Guarantee policy is the only logical way of providing jobs for everyone with guaranteed price stability. Whether it is accompanied by an incomes policy is a matter of refinement rather than substance.

NOTES

1. Mitchell (1996) provides extensive analysis and data to support this contention.
2. Mitchell (1996, 1998, 1999b), Mitchell and Watts (1997), Mitchell and Burgess (1998a, 1998b), and Mitchell, Watts and Burgess (2000) outline a case for the introduction of a full

employment policy based on the Job Guarantee model developed by Mitchell (1998). Mitchell and Burgess (1998b) place the Job Guarantee approach within the context of human rights and argue that the government has to be responsible for the maintenance of rights in this regard.

3. NAIRU refers to the non-accelerating inflation rate of unemployment and is used in this chapter to characterize the approach to inflation control advocated by monetarists, whereby a stock of unemployment is required to discipline the wage-price process.
4. NAIBER refers to the non-accelerating inflation buffer employment ratio and is the ratio of buffer stock employment to total employment that is required to stabilize inflation.
5. The buffer employment ratio (BER) is the ratio of buffer stock employment to total employment and rises (falls) as the private sector contracts (expands).
6. A third approach is a special case of the BSE policy. The government may not wish to let the market drive the BER high enough to equal the NAIBER and can intervene using an income policy to maintain a lower than otherwise BER while still maintaining price stability.
7. Mitchell and Watts (1997) indicate that the daily losses from unemployment in Australia are around \$156 million or \$3 100 per capita per annum. This is more than twice the alleged microeconomic inefficiencies estimated in the 1991-92 Annual Report of the Australian Industry Commission.
8. At the time, I also considered that the scheme could be financed by a levy on existing incomes, which was analogous to the MSF. As a result of other work, I no longer consider that there is a financing problem (Mitchell, 1996; Mosler, 1997-98; Wray, 1998).
9. Mitchell (1987a) argues that the MRU is cyclically sensitive and rises with the actual rate of unemployment as a result of cyclical changes in behavior of the labor market. He concludes that aggregate demand changes can influence the long-run steady-state unemployment rate subject to there being a minimum irreducible unemployment rate. Wage demands in the private sector are inversely related to the actual number of unemployed who are substitutes for those currently employed. When the economy slows, many workers lose their skills through obsolescence and new entrants are denied relevant skills. So the wedge between effective and actual excess supply rises in a downturn. The effective excess supply is the threat component of unemployment. To some degree, this insulates the wage demands from the cycle. The more rapid the cyclical adjustment, the higher is the unemployment rate associated with price stability. Stimulating jobs growth decreases the wedge because the unemployed develop new and relevant work skills. These upgrading effects provide an opportunity for real growth to occur as the MRU declines.
10. Vickrey (1996, 11) says, 'In the case at hand the debt is intended to supply a domestic demand for assets denominated in the domestic currency, and in the absence of a norm such as a gold clause, there can be no question of the ability of the government to make payments when due, albeit possibly in a currency devalued by inflation. Nor can there be any question of balking by domestic lenders as long as the debt is limited to that needed to fill a gap created by an excess of private asset demand over private asset supply.'
11. The philosophical considerations of a system that deliberately denies a large number of its working-age population employment were considered in Mitchell and Burgess (1998b, 1998c). That work covered the ethical aspects of unemployment and argued that in the context of the Universal Declaration of Human Rights (1948), governments in countries like Australia are systematically violating each of the clauses contained in Article 23. The Universal Declaration of Human Rights was unanimously agreed on December 10, 1948. Article 23 of the Universal Declaration of Human Rights states:
 1. Everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment.
 2. Everyone, without discrimination, has the right to equal pay for equal work.
 3. Everyone who works has the right to just and favorable remuneration, ensuring for himself and his family an existence worthy of human dignity and supplemented, if necessary, by other means of social protection.
 4. Everyone has the right to form and to join trade unions for the protection of his interests.

REFERENCES

- Bank of International Settlements (1994), *Annual Report 1993/94*, Basel: BIS.
- Barro, Robert J. (1993), *Macroeconomics, 4th edn*, New York: John Wiley.
- Boyd, J. (1988), 'Rising Public-sector Inequality: Some More Unpleasant Arithmetic', in M. Baskin et al. (eds), *Private Saving and Public Debt*, Oxford: Blackwell.
- Butlock, M., S. Grenville and G. Heenan (1993), 'The Exchange Rate and the Current Account', in A. Blundell-Wignall (ed.), *The Exchange Rate, International Trade and the Balance of Payments*, Reserve Bank of Australia, Sydney.
- Burgess, John, William F. Mitchell, Duncan O'Brien and Martin J. Watts (1998), 'Unemployment: Promises, Policies and Progress', *Labour and Industry*, 9 (2), 103-22.
- Christiansen, Hans and Charles Pigot (1997), 'Long-term Interest Rates in Globalized Markets', *OECD Working Paper No. 175*.
- Joyce, Jacqueline and Christopher Kent (1993), 'A Re-examination of the Determinants of Australia's Imports', *Discussion Paper 9312*, Reserve Bank of Australia, Sydney.
- Frederman, Milton, (1968), 'The Role of Monetary Policy', *American Economic Review*, 58, March, 1-17.
- Joy, Andrew (1997), 'Fighting for Job Creation', in Jonathan Meltzer and John Grieve Smith (eds), *Employment and Economic Performance: Jobs, Inflation and Growth*, Oxford University Press, Oxford, pp. 221-33.
- Graden, Wendell (1997), 'Job Assurance - The Job Guarantee Revisited', *Journal of Economic Issues*, 21 (3), 817-25.
- Griffin, B. (1971), *Storage and Stability*, McGraw-Hill: New York.
- Hawken, Paul (1997), 'Natural Capitalism', *Mother Jones*, March/April.
- Indes (1995), *State of Play*, 8, Allen and Unwin, St. Leonards.
- International Labour Organization (1999), 'The International Labour Organization and the Promotion of Full, Productive and Freely Chosen Employment', international consultation concerning follow-up to the World Summit for Social Development, Geneva, November 2-4.
- Kalicki, Michael (1971), 'Political Aspects of Full Employment', in *Selected Essays on the Dynamics of the Capitalist Economy*, by Michael Kalicki, pp. 138-45, Cambridge University Press, Cambridge.
- Kassam, Bruce and Anthony P. Rodrigues (1991), 'Financial Liberalization and Monetary Control in Japan', *Federal Reserve Bank of New York Quarterly Review*, 16 (3) (Autumn), 28-46.
- Lloyd, A.G. (1965), 'Reserve Price for Wool: a Defence', in D.E. James and C.D. Thornby (eds) (1973), *Introduction to Quantitative Methods in Economics*, Sydney and New York: John Wiley & Sons Australia.
- Lovins, Amory B., L. Hunter Lovins and Paul Hawken (1999), 'A Road Map to Natural Capitalism', *Hartford Business Review*, May-June, Reprint Number 99309, 145-58.
- Mitchell, William F. (1987a), 'The NAIKU: Structural Imbalance and the Macroequilibrium Unemployment Rate', *Australian Economic Papers*, 26 (48), 101-18.
- Mitchell, William F. (1987b), 'What is the Full Employment Unemployment Rate?', *Australian Bulletin of Labour*, 11 (1), 371-36.
- Mitchell, William F. (1994), 'Restoring Full Employment: A Problem of Policy Balance', *Australian Economic Review* 0 (105) (January-March), 24-30.
- Mitchell, William F. (1996), 'Inflation and Unemployment: A Demand Story', paper presented to European Unemployment Conference, sponsored by the European Commission, at the European University Institute, Florence, November 21-2.
- Mitchell, William F. (1998), 'The Butler Stock Employment Model and the NAIKU: The Path to Full Employment', *Journal of Economic Issues*, 32 (2) (June), 1-9.
- Mitchell, William F. (1999a), 'The Causes of Unemployment', in S. Bell (ed.), *The Unemployment Crisis: Which Way Out?*, Cambridge: Cambridge University Press.
- Mitchell, William F. (1999b), 'Full Employment Abandoned - the Microeconomic Story', in M. Gorman, and L. Rogers (eds), *Out of the Red*, St. Leonards: Allen and Unwin.
- Mitchell, William F. (2000a), 'The Job Guarantee in a Small Open Economy', in William F. Mitchell and E. Carlson (eds), *The Path to Full Employment*, Sydney: Centre for Applied Economic Research, pp. 89-116.
- Mitchell, William F. (2000b), 'The Job Guarantee and Inflation', *Employment and Labour Relations Review*, forthcoming.
- Mitchell, William (2001), 'The Job Guarantee and Inflation Control', *Economic and Labour Relations Review*, 12, 10-25.
- Mitchell, William F. and J. Burgess (1998a), 'Eight Propositions about Unemployment: An Australian Perspective', *Forum on Unemployment: New Visions, International Industrial Relations Society World Congress proceedings*, Bologna, Italy.
- Mitchell, William F. and J. Burgess (1998b), 'Employment, Unemployment and the Right to Work', *Australian Journal of Human Rights*, 4 (2), 76-94.
- Mitchell, William F. and J. Burgess (1998c), 'Unemployment, Human Rights and a Full Employment Policy in Australia', in M. Jones and P. Krusek (eds), *Globalisation, Human Rights and Civil Society*, Sydney: Prospect Press.
- Mitchell, William F. and M.J. Watts (1997), 'The Path to Full Employment', *Australian Economic Review*, 30 (4), 436-44.
- Mitchell, William F., C.E. Mitchell, M.J. Watts and A. Butlerworth (1995), *Women's Progress in the Economic Recovery*, Canberra: AGPS.
- Mitchell, William, Martin Watts and John Burgess (2000), 'Job Creation, Unemployment and Inequality in Australia', Centre of Full Employment and Equity, Working Paper No. 03, 2000.
- Moser, Warren (1997-98), 'Full Employment and Price Stability', *Journal of Post Keynesian Economics*, 20 (2) (Winter), 167-82.
- Omnrod, Paul (1994), *The Death of Economics*, London: Faber and Faber.
- Pursh, R.W. (1964), 'Reserve Price for Wool: A Critique', in C.D. Thornby and D.E. James (eds), *Introduction to Quantitative Methods in Economics*, Sydney and New York: Wiley & Sons Australia.
- Priest, E.S. (1967), 'Phillips Curves, Expectations of Inflation and Optimal Unemployment over Time', *Economica* (34) (August), 254-81.
- Smyth, M.C. (1985), 'On the Nature of the Phillips Curve', *British Review of Economic Issues*, 7 (16) (Spring), 63-86.
- Thornby, C.D. (ed) (1972), *Agricultural Policy: Selected Readings*, Ringwood: Penguin Books.
- Veeky, W. (1996), 'Fifteen Fatal Fallacies of Financial Fundamentalism: A Disquisition on Demand Side Economics', Columbia University Economics Department web site, <http://www.columbia.edu/~wv2/veeky.htm>.
- Von Weizsäcker, Ernst, Amory B. Lovins and L. Hunter Lovins (1997), *Doubling Wealth - Halving Resource Use*, Allen and Unwin: New York.
- Wray, L. Randall (1998), *Understanding Modern Money*, Cheltenham, UK and Lyme, US: Edward Elgar.