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The Job Guarantee Model and the NAIRU

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Introduction

Governments redistribute resources from private households to the public sector to advance a variety of collective actions. The desirable size of the government (and the amount of resources redistributed) is a political choice, rather than an economic issue. The question for economists is how government goes about its role once its scale is accepted. In this paper, I examine this role as it relates to unemployment. High and persistent unemployment has pervaded almost every OECD country since the mid-1970s. I argue that unemployment arises because the budget deficit is too small relative to the desires of the private sector to meet its tax obligations and to save and to hold money for transactions purposes.

Mass unemployment is a macroeconomic phenomenon and can never be a "real wage" problem. William Vickrey (1996) 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."

The rapid inflation of the mid-1970s 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 replaced other policy targets, including low unemployment. This has resulted in GDP growth in OECD countries, which has generally been below that necessary to absorb the growth in the labor force in combination with rising labor productivity.[1] The proximate cause of high unemployment has thus been the excessively restrictive fiscal and monetary policy stances by OECD governments driven by what we might call "backward" thinking (Mitchell 1996, 1998). Backward reasoning reflects a fundamental misunderstanding of the way fiat currency operates. It begins with the fallacious analogy that government spending, taxation, and debt issue is equivalent to the spending and financing decisions of the household. Accordingly, governments are supposed to seek financing prior to spending. The analogy has led orthodox economists to advocate balanced budgets to avoid higher tax rates and interest rates. But the underlying cause is that the reemerging free market ideology has convinced us wrongly that government involvement in

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

The economies that avoided the plunge into high unemployment 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). In this paper, I characterize this absorption function in terms of the Job Guarantee model. I will briefly outline the Job Guarantee approach and compare and contrast the inflation control mechanisms of this approach with those in an economy subject to a NAIRU.[2] I provide a more complete treatment of the financial implications of the Job Guarantee model elsewhere (Mitchell, 1998).

I demonstrate three 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 absorbs all the current idle workers into paid employment at a base level wage that it sets and maintains. I will show that the relevant price stability concept can be called the NAIBER.[3] The change in the buffer employment ratio (BER)[4] disciplines the wage-price pressures in the private sector by asserting the buffer stock wage as the numeraire. A third approach is a special case of the Job Guarantee 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. No rational government, which understood how its own currency works and the role of the budget deficit, would choose the NAIRU approach. The costs from lost output and social alienation are enormous.[5]

The Job Guarantee model can thus be justified on two separate grounds: First, it is appealing from social welfare considerations; and, second, it is the only rational strategy for a government that supplies a fiat currency and wishes to maximize macro benefits and retain price stability. I also outline a third justification in terms of environmental sustainability (Mitchell, 1998). I do not address this issue here.[6]

The Job Guarantee Model

Under the Job Guarantee policy the government continuously absorbs workers displaced from the private sector. The "buffer stock" employees would be paid the minimum wage, which defines a wage floor for the economy. Government employment and spending automatically increases (decreases) as jobs are lost (gained) in the private sector.

The Job Guarantee model allows currently idle workers to contribute in many socially useful activities including urban renewal projects and other environmental and construction schemes (reforestation, sand dune stabilization, river valley erosion control, and the like), personal assistance to pensioners, and assistance in community sports schemes.

While the existence of the buffer stock would reinforce the automatic stabilization built into the fiscal system, it remains a fluctuating work force. The design of the jobs and functions would have to reflect this. Projects or functions requiring critical mass might face difficulties as the private sector expanded, and it would not be sensible to use only buffer stock employees in functions considered essential.

What would this cost? Three recent studies estimate the costs of such schemes in the United Kingdom, the United States, and Australia, respectively (Gordon, 1997 for the United States; Kitson *et al.*, 1997 for the UK; and Mitchell and Watts, 1997 for Australia). All three studies produced estimates that lie in the range of 0.06 percent (United States) to 3.5 percent (Australia) of current GDP. The costs are overstated because they ignore the multiplier effects from the rising incomes of buffer stock workers. More detailed cost analysis can be found in the above references. The conclusion from all studies is that the Job Guarantee proposal is a very cheap option compared to the Okun gap losses that are incurred daily due to unemployment. High unemployment also places increased costs on the health system and is associated with increased family breakdown and higher crime rates.[7]

Inflation and the NAIRU

In this section, I examine the argument that the Job Guarantee would violate the NAIRU constraint and generate inflation. The expectations-augmented Phillips curve became the

centerpiece of the resurgence of orthodox thinking in the late 1960s as rising inflation rates challenged the credibility of the demand-oriented Keynesian macroeconomics. The conventional notion of an inflation-unemployment trade-off that had driven the conduct of fiscal and monetary policy since the end of World War II was abandoned in favor of a natural rate of unemployment (NRU) that was considered to be insensitive to aggregate policy. The quest for balanced budgets and deregulation replaced fiscal activism. The NAIRU became the target for governments obsessed with inflation.[8]

The OECD experience of the 1990s shows that persistently high unemployment eventually delivers low inflation -- the Phillips curve is alive and well (Mitchell, 1996).[9] Orthodox theory, in denying the existence of involuntary unemployment, had to adopt an esoteric explanation for the observed Phillips curve behavior. Adherents of the natural-rate hypothesis claimed that when a government stimulus pushes the inflation rate up, workers confuse the rise in nominal wages with a rise in real wages and increase their supply. The rise in labor supply lasts until the workers learn the truth and withdraw their labor, and ultimately the economy settles at the competitive equilibrium position -- the NAIRU. Attempting to maintain unemployment below the NAIRU results in accelerating inflation. The most damning piece of evidence against these supply-side explanations of unemployment is that quits are procyclical -- exactly the opposite hypothesized in the natural-rate story.[10]

Drawing from the competing claims literature, a NAIRU relationship can be established without the orthodox theory (Mitchell, 1987). Accordingly, inflation results from incompatible distributional claims on available real income, and unemployment acts to discipline the aspirations of labor so that they are compatible with the profit expectations of capital (Kalecki, 1971). The depressed product market demand also reduces the ability of firms to pass on prices. The temporary inflation stability defines what I have termed a macroequilibrium unemployment rate (MRU) (Mitchell, 1987).[11] Adding hysteresis, where the MRU is functionally related to the actual unemployment, defines a long-term trade-off between inflation and unemployment (Hargreaves Heap, 1980; Mitchell, 1987).[12]

Inflation and the Job Guarantee

If the government pays market prices for everything in a NAIRU world, then it is forced to use unemployment to maintain price stability. How would the introduction of the Job Guarantee policy change this? Suppose we characterize an economy with two labor markets: A (primary) and B (secondary) broadly corresponding to the dual labor market depictions. Wage setting in A is contractual and responds in an inverse and lagged fashion to relative wage growth (A/B) and to the Wait unemployment level (displaced Sector A workers who think they will be reemployed soon in Sector A).

A government stimulus to this economy increases output and employment in both sectors immediately. Wages are relatively flexible upwards in Sector B and respond immediately. The compression of the A/B relativity 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. The higher unemployment brings the real income expectations of workers and firms into line with the available real income and the inflation stabilizes - a typical NAIRU story.

Introducing the Job Guarantee policy into the depressed economy effectively makes Sector B the Job Guarantee sector because its wage levels are fixed by the government in accordance with its desire to set the value for its fiat money. This 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 previously are now reduced.

But the rising demand softens the product market, and demand for labor rises in Sector A. There are no new problems faced by employers who wish to hire labor to meet the 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 the higher sales volumes.

What about the behaviour 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. However, the demand pressures may eventually exhaust this stock, and wage-price pressures may develop.

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

Exchange rate changes may induce cost pressures. With flexible exchange rates, the demand stimulus would increase the price of foreign exchange, which under usual conditions increases the competitiveness of the economy while also adding to the domestic price level. 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." The

direct control to allow the depreciation to be insulated from the wage-price system could be an income policy.

Inflation Control -- the NAIBER

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, and the buffer stock pool drains. 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 requires that the government restrict aggregate demand and induce slack in the non-Job Guarantee sector. But crucially, the slack does not reveal itself as unemployment, and in that sense the Job Guarantee approach may be referred to as a "loose" full employment.

The Job Guarantee policy generates inflation stability because the suppression of non-buffer sector output asserts the numeraire price -- the Job Guarantee wage. This leads to the definition of a new concept, the Non-Accelerating Inflation Buffer Employment Ratio (NAIBER), which, in the Job Guarantee economy, replaces the NAIRU/MRU as an inflation control mechanism. The Buffer Employment Ratio (BER) is the ratio of Job Guarantee 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 a price set by the government; this price provides the inflation discipline. The disciplinary role of the NAIRU, which forces the inflation adjustment onto the unemployed, is replaced by the compositional shift in sectoral employment, with the major costs of unemployment being avoided. That is a major advantage of the Job Guarantee approach.

However, relying on the NAIBER may introduce other costs. For example, the rising BER will lower overall productivity growth, as resources are transferred out of the higher productivity, non-buffer sector. While this will not have direct implications for

competitiveness in the export sector, it is possible that productivity growth in the non-buffer stock sector itself will also fall as scale declines (Kaldor, 1978).

The Job Guarantee economy thus has some new policy choices to make. Minimizing the BER improves productivity growth but leaves the economy open to inflation. By maximizing the BER, it controls inflation, but reduces productivity growth overall and may face trade problems.[13]

The alternative is to separate the BER from the inflation control via an income policy (Mitchell and Watts, 1997). With the Job Guarantee economy, the government sets a wage floor and thus the price that it is willing to pay to transfer resources from the non-buffer stock sector to the buffer stock sector. An income policy using this numeraire as the basis for wage adjustment would allow the economy to achieve both full employment and price stability with a lower BER. The design of such a policy is not considered here.

Conclusion

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

References

Blinder, Alan, (1987). *Hard Heads Soft Hearts*, (Reading: Addison-Wesley).

Gordon, Wendell (1997). "Job Assurance -- The Job Guarantee Revisited," *Journal of Economic Issues* 21, no. 3, (September), 817-825.

Hargreaves Heap, S. P. (1980). "Choosing the wrong 'Natural' Rate: Accelerating Inflation or Decelerating Employment and Growth," *Economic Journal* 90, 611-620.

Kitson, M., J. Michie, J., and H. Sutherland (1996). "A Price Well Worth Paying? The Benefits of a Full-Employment Strategy," In *Employment and Economic Performance: Jobs,*

Inflation and Growth, Edited by Jonathan Michie and John Grieve Smith, 234-253, (Oxford: Oxford University Press).

Kaldor, N. (1978). *Further Essays on Economic Theory*, (New York: Holmes and Meirer).

Kalecki, Michal (1971). "Political Aspects of Full Employment," In S*elected Essays on the Dynamics of the Capitalist Economy*, by Michal Kalecki, 138-145, (Cambridge: CUP).

Mitchell, William F. (1987). "The NAIRU, Structural Imbalance and the Macro-equilibrium Unemployment Rate," *Australian Economic Papers* 26, no. 48, (June), 101-118.

Mitchell, William F. (1996). "Inflation and Unemployment: A Demand Story," presented to *European Unemployment Conference*, sponsored by the European Commission, at the European University Institute, Florence, November.

Mitchell, William F. (1998). "Buffer Stock Employment models and Public Finance", presented to *the Functional Finance in Retrospect and Prospect Conference*, New School, New York, April.

Mitchell, William and Martin Watts (1997). "The Path to Full Employment," *Australian Economic Review,* 4th Quarter.

Mosler, Warren. *Full Employment and Price Stability*, from http://www.warrenmosler.com, 1997.

Okun, A. M. (1973). "Upward Mobility in a High Pressure Economy." *Brookings Papers on Economic Activity*. 1.

Ormerod, Paul (1994). *The Death of Economics*, (London: Faber and Faber).

Thurow, Lester (1983). *Dangerous Currents*, (Sydney: Allen and Unwin).

Vickrey, William. (1996). "Fifteen Fatal Fallacies of Financial Fundamentalism: A Disquisition on Demand Side Economics." published electronically by Columbia University and available at http://www.columbia.edu/dlc/wp/econ/vickrey.html.

[1] Mitchell (1996) provides extensive analysis and data to support this contention.

[2] NAIRU refers to the Non-Accelerating Inflation Rate of Unemployment and is used in this paper to characterize the approach to inflation control advocated by monetarists, whereby a stock of unemployment is required to discipline the wage-price process.

[3] NAIBER refers to the Non-Accelerating Inflation Buffer Employment Share and is the ratio of Job Guarantee employment to total employment that is required to stabilize inflation.

[4] The Buffer Employment Ratio (BER) is the ratio of Job Guarantee employment to total employment and rises (falls) as the private sector contracts (expands). The Job Guarantee works on the buffer stock principle of price control common in agricultural price support schemes.

[5] Mitchell and Watts (1997) indicate that the daily losses from unemployment in Australia are around $156 million or $3100 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.

[6] Post Keynesian economists argue that large-scale unemployment is due to insufficient demand and can be cured if the public sector stimulates spending using traditional fiscal and monetary instruments. However, the standard Post Keynesian view also fails to take into account issues of environmental sustainability. Even if it were possible to expand demand enough to promote growth sufficient to keep pace with labor force growth and productivity growth and mop up the huge stocks of long-term unemployment, how could the natural ecosystems, already under great strain, cope? There is a need to change the composition of final output toward environmentally sustainable activities. It is not increased demand per se that is necessary, but increased demand in certain areas of activity.

[7] Gordon (1997: 831) concludes that "beyond this, there is an important sense in which the job guarantee program would not cost anything. The goods or services produced by the labor of the beneficiary of the job guarantee increase the gross national product and the national welfare by as much as the worker is paid as reliably as does any 'free market' labor. The laborer is 'earning' the wage or salary received. Also, and importantly, the worker under the job guarantee program has a job of which the worker can be as proud as are other citizens with their jobs."

[8] There is a distinction between the NAIRU and the natural rate of unemployment (NRU). The NAIRU is the NRU with some structural impediments in the economy added. The mechanics of the inflation process are the same, however.

[9] The NRU-NAIRU concept arose from a misunderstanding of what the trade-off between inflation and unemployment really means and a failure to appreciate the way in which fiat money works in the economy. The coincidence of high inflation and high unemployment in the 1970s -- the period of stagflation -- appeared to be contrary to orthodox Keynesianism. Blinder (1987: 39) said "So when high inflation and high unemployment occurred together in the 1970s, many observers wrongly declared the Phillips curve dead and conventional macroeconomic analysis bankrupt."

[10] Thurow (1983: 186-87) rejected this approach and asked, "Can you honestly think that WWII presented a case of misinformation that produced low unemployment? No. But when governments tighten fiscal and monetary policies, unemployment also seems to rise as predicted."

[11] While the MRU defines a (transitory) steady state relationship between unemployment and inflation, it has no connotations of voluntary maximizing individual behavior or market clearing that underpins most orthodox versions of the NAIRU concept.

[12] In a hysteretic economy aggregate demand influences the long-term steady-state unemployment rate, and activism can permanently reduce the unemployment rate. The dynamics of this interaction are examined in Mitchell (1987).

[13] Mitchell (1998) also shows that the BER is positively related to an environmentally favorable mix of goods.