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7

Why Public Sector Job Creation Should be Fashionable

William Mitchell

Introduction

Why should public sector job creation be fashionable? The short answer is that persistent labour underutilization is a huge economic waste and the private sector will never provide enough working hours at acceptable wages to satisfy the workforce. A longer answer requires an understanding of the basic operations of a modern monetary economy, which recognizes that fiat currency systems are public monopolies that introduce imperfect competition into the monetary system, and that the imposition of taxes coupled with insufficient government spending generates unemployment.

This chapter aims to provide a macroeconomic framework based on this recognition to underpin the case for public employment creation. We show that unemployment levels (beyond frictions) reflect macroeconomic policy choices by the national government and expose the flaws in the standard orthodox macroeconomics.

We also recognize that many governments have entrusted their central banks with the responsibility for managing the price level. Accordingly, central banks set the interest rate and attempt to *manage* inflationary expectations to achieve an optimal level of price stability and capacity utilization (typically assumed by the orthodoxy to be neutral in the long run). Orthodox analysis also acknowledges negative real effects from disinflationary monetary policy but theorize them to be necessary for optimal long-term growth and small in magnitude. But significant empirical evidence supports the view that sacrifice ratios remain large and persistent (see Ball and Sheridan, 2003, Mitchell and Muysken, 2008).

Moreover, central banks use the pool of underutilized workers as a price anchor. But given that the effectiveness of this strategy depends on the

'condition' of the unemployment pool, we argue that a more effective buffer stock option lies in a public employment programme, which we term the Job Guarantee (JG).¹ We show that the JG not only anchors the price level to the price of the buffer stock labour but also produces useful output with positive supply side effects.

We thus contrast the current NAIRU orthodoxy (unemployment buffer stock) with the JG alternative. The JG approach represents a break in paradigm from the NAIRU-buffer stock approach and also from traditional Keynesian analysis. The difference is a shift from what can be categorized as *spending on a quantity rule* to *spending on a price rule*. Under current policy (and generalized Keynesian expansion), government generally budgets a quantity of dollars to be spent at prevailing market prices whereas under the JG, the government offers a fixed wage to anyone willing to work and lets market forces determine total government spending.

The following section provides the macroeconomic framework underpinning the chapter. We then show that the NAIRU approach is a costly means for inflation proofing compared to the JG approach outlined in the next section. We also argue that standard Keynesian policy to counter unemployment lacks a price anchor and arguments posed by Kaleckians who suggest that the capitalist sector would undermine the JG policy are erroneous. Concluding remarks follow.

A modern money macroeconomic framework

This section summarizes the modern monetary theory outlined in Mitchell and Muysken (2008). This theory refers to a monetary system characterized by a floating exchange rate and monopoly provision of fiat currency by the national government. Most countries operate monetary systems with these characteristics.

First, the monetary unit defined by the government has no intrinsic worth. It cannot be legally converted by government, for example, into gold as under the gold standard. The viability of the fiat currency is guaranteed because it is the only unit acceptable for payment of taxes and other financial demands of the government.

Second, as a matter of national accounting, the national government deficit (surplus) equals the non-government surplus (deficit). In aggregate, there can be no net savings of financial assets by the non-government sector without cumulative government deficit spending. The national government via net spending is the only entity that can provide the non-government sector with net financial assets and thereby

simultaneously accommodate any net desire to save and hence eliminate unemployment. Additionally, and contrary to neo-liberal rhetoric, the systematic pursuit of government budget surpluses is necessarily manifested as systematic declines in private sector savings.

Third, decreasing levels of net private savings financing government surpluses increasingly leverage the private sector. The deteriorating debt to income ratios which result will eventually see the system succumb to ongoing demand-draining fiscal drag through a slow-down in real activity.

Fourth, the analogy neo-liberals draw between private household budgets and the government budget is false. Households use the currency and must finance their spending. However, government issues the currency and must spend first (credit private bank accounts) before it can subsequently tax (debit private accounts). Government spending funds the private sector tax payments and net savings and is not inherently revenue constrained.

Fifth, unemployment occurs when net government spending is too low. As a matter of accounting, for aggregate output to be sold, total spending must equal total income (whether actual income generated in production is fully spent or not each period). Involuntary unemployment is idle labour unable to find a buyer at the current money wage. In the absence of government spending, unemployment occurs when the private sector, in aggregate, desires to spend less of the monetary unit of account than it earns. Nominal (or real) wage cuts *per se* do not clear the labour market, unless they somehow eliminate the private sector desire to net save and increase spending. Thus, unemployment occurs when net government spending is too low to accommodate the need to pay taxes and the desire to net save.

Sixth, while the national government is not financially constrained it still issues debt to control its liquidity impacts on the private sector. Government spending and purchases of government bonds by the central bank add liquidity, while taxation and sales of government securities drain private liquidity. These transactions influence the cash position of the system on a daily basis and on any one day they can result in a system surplus (deficit) due to the outflow of funds from the official sector being above (below) the funds inflow to the official sector. Budget deficits result in system-wide surpluses (excess bank reserves) and competition between the commercial banks to create better earning opportunities for these surplus reserves then puts downward pressure on the central bank target rate. If the central bank desires to maintain this target rate then it must drain this surplus liquidity by selling government debt. In other

words, government debt functions as interest rate support via the maintenance of desired reserve levels in the commercial banking system and not as a source of funds to finance government spending.

Unemployment buffer stocks and price stability

Full employment was abandoned as a policy goal once policy makers accepted the natural rate assertions that only one unemployment rate is consistent with stable inflation; that there is no role for discretionary fiscal policy; and that only microeconomic policy can reduce the natural unemployment rate. As a result, the policy debate now concentrates on deregulation, privatization and reductions in welfare provisions with tight monetary and fiscal regimes instituted (see Mitchell, 1998, 2001).

Central bankers consider that monetary policy should focus exclusively on price stability given that the economy is alleged to gravitate to some unique real activity level. In this NAIRU depiction, rising demand increases output and employment but generates inflation. In response, the central bank increases interest rates to repress demand and increase unemployment, which forces real income expectations of workers and firms into line with available real income. This stabilizes inflation and renders inflationary expectations benign. Fiscal policy is now constructed as a passive support for monetary policy.

The NAIRU policy framework is in contradistinction to the policy practice in the post-World War II period to 1975 which maintained demand levels sufficient to ensure that full employment was achieved. Unemployment rates were usually below 2 per cent throughout this period. Since 1975, unemployment has persisted at high levels although in some economies low quality, casualized work has emerged as a reaction to deficient demand for labour hours.

The empirical evidence is clear that while inflation is now low in most OECD economies, the same economies have not provided enough jobs since the mid-1970s and monetary policy practice has contributed to the malaise (Modigliani, 2000). There is overwhelming evidence to suggest that the cumulative real costs of this strategy have been substantial. In addition to lost output, other real costs include the depreciation of human capital, family breakdowns, increasing crime and poor health.

However, the effectiveness of an unemployed buffer stock deteriorates over time, with ever larger numbers of *fresh* unemployed (or casualized underemployed) required to function as a price anchor. So is using a persistent pool of underutilized labour the most cost-effective way to achieve price stability? The understanding we achieved from our earlier discussion would suggest that a better alternative would be to utilize an

employed buffer stock approach using net government spending as the source of funds.

Employment buffer stocks and price stability

A productive role for the central bank

A superior use of the labour slack necessary to generate price stability would be for the government to make an unconditional fixed-wage offer to anyone unable to find work elsewhere, that is, introduce a JG. The JG will anchor the general price level to the price of buffer stock labour. Politicians can then set a minimum acceptable living standard and ensure that a base level job is always available to allow all citizens to achieve that standard independent of welfare payments.

The concept of a Job Guarantee (JG)

The current JG proposal was conceived by Mitchell (1998) and is based on the buffer stock principle. Around the same time, and independently, Mosler (1997-98) proposed an Employer of the Last Resort approach to unemployment. The two proposals are identical in separation and intent. Mitchell (2000) discussed the link between the JG approach and agricultural buffer stock schemes like the Wool Floor Price Scheme introduced in Australia in 1970. While generating *full employment* for wool production, the issue focused on the definition of a reasonable level of output when demand was declining. The argument does not apply to unemployed labour. If there is a price guarantee below the prevailing market price and a buffer stock of working hours constructed to absorb the excess supply at that price, then full employment can be generated without hindering the price structure. The other problem with commodity buffer stock systems is that they encouraged over-production, which ultimately made matters worse when the scheme was discontinued and the product was dumped onto the market. But in maintaining a labour buffer stock no one would expect employed workers to breed more than unemployed workers (see Graham, 1937).

Under the JG, the public sector offers a fixed wage job, which we consider to be *price rule spending*, to anyone willing and able to work, thereby establishing and maintaining a buffer stock of employed workers. This buffer stock expands (declines) when private sector activity declines (expands), much like today's unemployed buffer stocks, but potentially with considerably more liquidity if properly maintained.

The JG thus minimizes the real costs currently associated with the flux of the private sector. When private employment declines, JG employment will automatically increase. The nation always remains

employed, with only the mix between private and public sector employment fluctuating in line with private spending decisions. The JG wage would become the national minimum wage. To avoid disturbing the private sector wage structure and to ensure the JG is consistent with price stability, the JG wage rate may be set at the current legal minimum wage, though an initially higher JG wage may be set higher as part of a broader priority for an industry policy.

While both private and public employment growth were relatively strong between 1945 and the mid-1970s, the major reason full employment was sustained in most OECD countries was because they maintained a buffer of jobs which provided easy employment access to the least skilled workers in the labour force (see Ormerod, 1994). Some of these jobs, such as process work in factories, were available in the private sector. However, the public sector also offered many buffer jobs that sustained workers through hard times. In some cases, these jobs provided permanent work for the low skilled and otherwise disadvantaged workers. A JG would restore the buffer stock capacity to any economy and ensure that, at all times, the least advantaged workers could earn a wage and live free of welfare support.

While it is easy to characterize the JG as purely a public sector job creation strategy, it is important to appreciate that it is actually designed to deliver full employment *and* price stability.

Inflation control under a job guarantee

The fixed JG wage provides an in-built inflation control mechanism. The Buffer Employment Ratio (BER), the ratio of JG employment to total employment, conditions overall wage demands (see Mitchell, 1998). A rising BER reduces real wage demands. If inflation exceeds the current target, tighter fiscal and monetary policy can increase the BER, thus transferring workers from the inflating sector to the fixed-price JG sector. Ultimately this attenuates the inflation spiral. So instead of a buffer stock of unemployed being used to discipline the distributional struggle, the JG achieves this via compositional shifts in employment. The BER that results in stable inflation is called the Non-Accelerating-Inflation-Buffer Employment Ratio (NAIBER) (Mitchell, 1998). It is a full employment steady state JG level, which is dependent on a range of factors including the path of the economy.²

The JG introduces no relative wage effects and rising demand *per se* does not necessarily invoke inflationary pressures because by definition it is satisfying a net savings desire. Additionally, in today's demand-constrained economies, firms are likely to increase capacity utilization

to meet the higher sales volumes. There are no new problems faced by employers who wish to hire labour to meet the higher sales levels. Any initial rise in demand will stimulate private sector employment growth while reducing JG employment and spending.

However, these demand pressures are unlikely to lead to accelerating inflation while the JG pool contains workers employable by the private sector. While the JG policy frees wage bargaining from the threat of unemployment, we note offsetting factors. Private firms would still be required to train new workers in job-specific skills in the same way they would in a non-JG economy. However, JG workers are far more likely to have retained higher skill levels than those forced to endure lengthy spells of unemployment. This changes the bargaining environment significantly because firms now have reduced hiring costs. Previously, the same firms would have lowered their hiring standards and provided on-the-job training and vestibule training in tight labour markets. The JG policy thus reduces the hysteretic inertia embodied in the long-term unemployed and permits a smoother private sector expansion. Further, the long-term unemployed do not discipline wage bargaining (Mitchell, 1987, 1998). We thus hypothesize that the threat factor under the JG would be higher.

Would the NAIBER be higher than the NAIRU?

Some commentators argue that the NAIBER would have to be greater than the NAIRU for an equivalent amount of inflation control (for example, Sawyer, 2003) because: (a) JG workers will have higher incomes (than when they were unemployed) and so demand levels will be higher than under a NAIRU world. If true, and given the NAIRU achieved output levels commensurate with price stability, then, other things equal, the higher demand would generate inflationary impulses. Sawyer (2003, p. 898) represented the problem as 'the level of unemployment achieved could be below a supply-side-determined inflation barrier . . . the NAIRU'; and (b) a JG abandons the disciplining role of unemployment on the wage setting process.

Both arguments are erroneous. While JG workers would enjoy higher income than when they were unemployed, it is not inevitable that aggregate demand would rise with the introduction of JG. We consider this issue in a later section. For now assume that aggregate demand is higher under a JG, which may stimulate private investment and then inflation. The government could then contract the economy and increase the JG pool to keep inflation stable. Of-course, as noted above rising

demand *per se* does not necessarily invoke inflationary pressures if the extra liquidity is satisfying a net savings desire by the private sector.

The JG impact on the price level will also depend on qualitative aspects of the JG pool relative to the NAIRU unemployment buffer. It is here that the so-called threat debate enters. As explained earlier, the JG pool will be a qualitatively superior inflation fighting pool than an unemployment pool. Long-term unemployment generates costs far in excess of the lost output that arises from under full employment states (see Mitchell, 2001). Just as soggy rotting wool is useless in a wool price stabilization scheme, labour resources should be nurtured. The ILO (1996–97, p. 56) said that ‘prolonged mass unemployment transforms a proportion of the unemployed into a permanently excluded class’. The ILO argued that these people ‘cease to exert any pressure on wage negotiations and real wages’. The result is that ‘the competitive functioning of the labour market is eroded and the influence of unemployment on real wages is reduced.’

We thus hypothesize that the NAIBER would be lower than the NAIRU at the time of JG introduction.

The political aspects of the job guarantee

Some commentators (for example, Sawyer, 2003) invoke Kalecki’s ‘Political Aspects of Full Employment’ arguments to attack the JG. Kalecki (1971, p. 138) said ‘the assumption that a Government will maintain full employment in a capitalist economy if it knows how to do it is fallacious. In this connection the misgivings of big business about maintenance of full employment by Government spending are of paramount importance’. Kalecki (1971, p. 139) listed three reasons why industrial leaders would oppose full employment ‘achieved by Government spending’. The first asserted that the private sector opposes government employment *per se*. The second asserted that the private sector dislikes public sector infrastructure development or any consumption subsidies. The third asserted that the private sector dislikes ‘the social and political changes resulting from the *maintenance* of full employment’ (emphasis in original).

It is clear, however, that most economies enjoyed full employment between 1945 and the mid-1970s on the back of strong private sector investment and interventionist government fiscal and monetary policy. The relative stability was only broken by a massive supply shock and poorly crafted policy responses that provoked the malaise that we are still enduring 30 years later. In Kalecki’s defence it might be argued that it took some time for the Welfare State to generate the unsustainable inflationary biases observed in the 1970s (Cornwall, 1983).

Kalecki (1971, pp. 139–40) explained how the dislike by business leaders of government spending:

grows even more acute when they come to consider the objects on which the money would be spent: public investment and subsidising mass consumption ... [and if public spending overlaps with private spending then] ... the profitability of private investment might be impaired and the positive effect of public investment upon employment offset by the negative effect of the decline in private investment.

This criticism is inapplicable to the JG because the JG jobs would be located in areas that have been neglected or harmed by capitalist growth.

Kalecki (1971, p. 140) acknowledged that the ‘pressure of the masses’ in democratic systems may thwart the capitalists and allow the government to engage in job creation. His principal objection then seems to be that ‘the *maintenance* of full employment would cause social and political changes which would give a new impetus to the opposition of the business leaders’. This is the threat argument noted above. Kalecki (1971, pp. 140–1) said that ‘under a regime of permanent full employment, “the sack” would cease to play its role as a disciplinary measure’. Kalecki was commenting on a fully employed private sector prone to inflation rather than a mixed private-JG economy. The JG creates ‘loose full employment’ because the JG wage is fixed (growing with national productivity). Earlier, we demonstrated that JG workers pose a more credible threat to the current private sector employees than large pools of unemployed.

Kalecki (1971, pp. 142–4) said that ‘lasting full employment ... [is not to the liking of capitalists because the] ... workers would “get out of hand” and the “captains of industry” would be anxious to teach them a lesson’. Kalecki was very vague about the form that capitalist opposition would take. He implied that the reaction would work via business and rentier interests pressuring the government to cut its budget deficit. Presumably, corporate investors could threaten to withdraw investment. There is ample evidence available to show that the investment ratio moves as a mirror image to unemployment in most OECD countries (Mitchell, 2001; Mitchell and Muysken, 2008). Far from being a reason to avoid active government intervention, the JG is needed to insulate the economy from these investment swings, whether they are motivated by political factors or technical profit-oriented factors.

Another factor bearing on the relevance of Kalecki’s analysis now is the increasingly deregulated and globalized economic structure. Many

countries have dismantled their welfare states and deregulated their labour markets. Trade union membership has also declined substantially as the traditional manufacturing sectors have shrunk and the service sectors expanded. Trade unions struggle to organize the service sector due to its heavy reliance on casual work and gender bias towards women. It is now much harder for trade unions to impose costs on the employer. Far from being a threat to employers, the JG policy becomes essential for restoring some security for workers.

Does the JG operate akin to a generalized demand expansion?

Mitchell and Wray (2005, p. 235) note that a common misconception considers the JG to be similar to any Keynesian approach that 'increases employment by raising aggregate demand'. This misconception has been at the heart of a debate within Post Keynesian economics about the JG approach, characterized by the exchange between Sawyer (2003, 2005) and Mitchell and Wray (2005). Sawyer (2003) claimed that the JG is similar to any traditional Keynesian demand expansion. If Sawyer's representation is valid then the debate quickly moves to comparing different options that could be pursued by expansionary fiscal policy – that is, by increasing government spending or lowering taxes.

Mitchell and Wray (2005, p. 236) showed that the JG approach cannot be characterized as Keynesian 'pump-priming' because it is a buffer stock programme, which 'hires off the bottom'. Private activity levels and non-JG government spending determine the size of the buffer stock, which fluctuates with aggregate demand. However, the maintenance of full employment under a JG is independent of the state of aggregate demand.

While Sawyer (2003, p. 884) said that the 'ELR scheme seeks to remove demand-deficient unemployment through the provision of required aggregate demand', Mitchell and Wray (2005, p. 237) demonstrated that the 'ELR *can be* implemented without raising aggregate demand' (italics in original). The introduction of the JG could be accompanied by either deflationary or expansionary fiscal policy. Mitchell and Wray (2005, p. 236) concluded that the JG approach is functional 'regardless of the level of demand'.

Why not just pursue full employment through generalized Keynesian expansion?

Progressive economists mostly agree that using unemployment buffers to control inflation is costly and unacceptable. However most progressive economists advocate generalized fiscal and monetary expansion mediated by incomes policy and controlled investment as a solution

to unemployment (Davidson, 1994; Seccareccia, 1999; Kadmos and O'Hara, 2000; Ramsay, 2002–3; Sawyer, 2003, 2005). Under generalized expansion, the government spends at market prices or provides incentives to profit-seekers to expand activity in order to ensure that output is at the full employment level. Typically, public and private capital formation is targeted.

Four major criticisms of this approach are relevant. First, indiscriminate demand expansion is unlikely to lead to employment opportunities for the most disadvantaged members of society. Second, generalized expansion fails to address spatial labour market disparities which are now common across OECD economies. Third, generalized expansion has no counter-inflation mechanism. Fourth, generalized expansion does not address environmental concerns because it exploits market allocation as the basis for employment expansion.

Mitchell and Juniper (2007) address the regional disparity issue using what they call a Spatial Keynesian framework. They show that generalised expansion will not target regions in need of employment creation, which may be reliant on a declining industry. Further, aggregate policy is not able to account for feedback or spill-over effects between regions which are driven by social networks and neighbourhood effects. This behaviour underpins the observations common in OECD economies that clusters of high unemployment regions or *hot spots* form as a result of spatial interdependency (Mitchell and Bill, 2006). Arestis and Sawyer (2004, pp. 11, 18) argue that 'appropriate demand policies are required to stimulate investment and underpin full employment'. But how can we ensure that such investment will provide jobs in failing regions? How will the most disadvantaged workers with skills that are unlikely to match those required by new technologies going to be included in the generalized expansion?

The standard Keynesian approach also has no reliable inflation anchor. A high unemployment economy will typically react to increases in nominal demand by increasing output. This applies to the introduction of a JG as well as a generalized expansion. However, a generalized expansion will inject considerably more nominal demand into the system, directly and via the multiplier processes, than would be the case under the JG. Generalized expansion relies on demand stimulus (spending at market prices) to increase employment and therefore provides no nominal anchor. If the quantity adjustment gives way to price adjustment then full employment may never be reached. Incomes policies are proposed to forestall the inflation barrier. But while an incomes policy may help constrain cost pressures there are few examples of a successful incomes

policy being implemented and sustained in any economy. Ultimately, they do not provide a long-term inflation anchor. In sharp contrast, the JG does not rely on government spending at market prices and exploiting multipliers to achieve full employment.

Generalized expansion relies on the market to provide the increased employment. Therefore the allocations that follow largely reflect private costs and benefits, hence environmental constraints are likely to emerge. JG proponents emphasize the regional dispersion of unemployment. Higher output levels are required to increase employment, but the composition of output remains a pivotal policy issue. JG jobs would be designed to support local community development and advance environmental sustainability. Indeed, an environmental criterion could be used to determine which jobs are acceptable for the JG, introducing an environmental planning aspect to the policy framework. JG workers could participate in many community-based, socially beneficial activities that have intergenerational payoffs, including urban renewal projects, community and personal care, and environmental schemes such as reforestation, sand dune stabilization, and river valley and erosion control. Most of this labour intensive work requires very little capital equipment and training (Mitchell, 1998). The spatial targeting of the JG is the essence of Spatial Keynesian strategy (Mitchell and Juniper, 2007) which is in contrast to the bluntness of orthodox Keynesian tools which fail to account for the spatial distribution of social disadvantage.

Both the JG and generalized expansion can co-exist, although such a co-existence, for reasons noted below may not be optimal. We thus qualify our earlier discussion, where we advocated government spending when unemployment is too low. More precisely, we now say that this spending should not be of a general nature. We conclude that a generalized expansion alone is not a preferred strategy.

Microeconomic aspects of the job guarantee

While an understanding of the monetary framework discussed in the second section allows one to dismiss the usual macroeconomic criticisms of public sector job creation (for example, Ricardian equivalence and crowding out), various microeconomic criticisms of the JG have been made by progressive economists. Questions at issue include: Are JG jobs real jobs? Does the JG produce zero value output? Does the JG provide career paths back into private employment? Does the JG replace unemployment with underemployment? Should the JG be accompanied by an abolition of unemployment benefits and other income support payments?

Are JG jobs real jobs? Can the JG be managed?

Some commentators have criticized the JG approach on the basis that there would not be enough meaningful opportunities to utilize the unemployed efficiently. Sawyer (2003, p. 891) argued that if JG jobs are to be inclusive to all then they would 'not require much skill' or 'use skills which are widely available in the population' and would 'lead to the production of useful output' which is not 'necessary in that the output is only forthcoming when aggregate demand is low and the ELR jobs are required'. To justify his claim, Sawyer (2003, p. 894) invokes neoclassical marginal productivity theory, by arguing that if the JG pays low wages, then productivity of JG workers must be low. However, productivity is mostly socially determined rather than being an individual worker characteristic. Further, we should consider social productivity, rather than productivity in a private market sense. We do not believe that low JG pay necessarily ensures low *social* productivity of the JG programme.

Further, it is surprising that these types of criticism are applied exclusively to public sector job creation (usually vilified as make work schemes or raking and boondoggling). The fact that OECD economies create thousands of low-wage, low-skill private sector jobs every day is largely ignored. Sawyer (2003) is representative of this dualism. Mitchell and Wray (2005, p. 239) said that it appears that Sawyer

is disturbed only when the public sector creates such jobs, because of problems of switching on jobs which have capital requirements, problems in 'undercutting of wages for mainline public sector jobs' by being 'substitutes for mainline public sector employment,' problems in yielding output 'in competition with output which is or could be produced by the private sector', problems relating to the spatial and temporal distribution of unemployment and the like.

It is remarkable that the invisible hand is presumed to operate smoothly, while the visible hand of government is believed to be incapable of dealing with logistical complications.

The employment buffer stock principle does place some specific requirements on the structure of the jobs. There are administrative challenges arising from the cyclical nature of the JG pool. As Mitchell and Wray (2005, p. 239) put it:

JG jobs would have to be productive yet amenable to being created and destroyed in line with the movements of the private business cycle. While challenging this is not an impossible requirement for

public policy to meet. The private sector does not have a monopoly on being able to mobilise a diverse range of resources and successfully complete thousands of tasks within a tight and complex schedule.

This suggests that the buffer stock should be split into two components: a core component representing the average buffer stock over the typical business cycle given government policy settings, trend private spending growth, and a mismatch of labour force characteristics and employer preferences; and a transitory component fluctuating around the core as private demand ebbs and flows.

The existence of a stable core, which might change slowly and predictably as government policy settings change, would allow JG administrators to allocate workers to jobs more easily. Many of these core jobs would be more or less permanent. More ephemeral JG activities could then be designed to switch on when private demand declined below trend. These activities would not deliver outputs that might be required on an ongoing basis, but would still advance community welfare (see Mitchell, 1998).

Once a steady-state JG pool was determined, work allocations would be prioritized among a broad array of productive activities. In this way, it is unlikely that any important function or service would be terminated abruptly, due to a lack of buffer stock workers, when the private demand for labour rises. Thus, the design and nature of JG jobs would reflect the underlying notion of a buffer stock, which would have a steady-state or core component determined by government macroeconomic policy settings, and a transitory component determined by private spending variations. Longer-term changes in the size of the average buffer stock would reflect discrete changes in government policy.

In determining whether a JG job is superior to unemployment (that is, whether it is socially beneficial to employ unused labour) we only have to determine whether the marginal benefits are positive. With creative thinking and professional administration this very low benchmark would be easily exceeded by the JG jobs on offer.

Does the job guarantee produce zero value output?

Sawyer (2003, p. 895) approached the quality of jobs issue by concluding that JG workers would usually be 'paid more than they produce' which implies that the output they produce is not valued by the economy. Indeed, the criticism that JG jobs are not 'real jobs' carries with it the related claim that the output produced is not 'real output'. So if the JG wage (w) is greater than the productivity of the JG job (q) then according

to Sawyer (2003, p. 895), 'the ELR workers are making net claims on the rest of the economy (equal to $w - q$) ... [and] ... that the net claims ... are greater than those currently made by the unemployed'. Sawyer (2003: 895) then concluded that if the output 'is not valued by others, it is as though the ELR worker is producing nothing'. How should we assess this claim?

First, it suggests that the only mechanism that can validate output as being of value is the private market (which includes government spending that competes in the private market for resources). Even neoclassical theory acknowledges that private benefits and costs can diverge from social benefits and costs. Many activities have zero private market value but deliver positive social value. The JG would focus on labour intensive activities in this category. It is also obvious that many jobs are created in the private sector, especially in the low skill service sector, which may have very little or even negative social value. In assessing social value, we also have to consider the impacts on the previously unemployed individual who transits from welfare dependence via the JG. There is substantial evidence that these benefits are likely to be significant (Mitchell, 1998). Mitchell and Wray (2005, p. 241) concluded that it 'is difficult to believe that ELR will produce less social value than fast food production'.

Second, we have to confront the static concepts of work and productivity, which underpin the criticism that JG jobs are not productive. To accommodate the benefits of technological progress a debate about the future of paid work is clearly important. The concept of gainful work, which relates to performing work for profit will have to be broadened to embrace a range of other activities not usually considered to be work. The way we link work and income generation such that old-style capitalist concepts of the work ethic are replaced with more creative uses of human activity is necessary. Further the right to work and hence income has to be preserved for all. In advocating a transition, we do not support those who advocate institutionalizing non-work via a basic income guarantee. We do not consider society is advanced enough as yet to embrace a culture whereby some who can work do not yet receive state support. Social attitudes evolve slowly and are changed through the educational system.

The JG is thus a forward-looking approach for a state aiming to rebuild communities based on the purposeful nature of work that extends beyond the creation of surplus value for the capitalist. It provides a framework to extend the concept of work itself to include activities normally dismissed as being leisure under current ideology.

Does the job guarantee provide career paths back into private employment?

Sawyer (2003), Kadmos and O'Hara (2000) and Seccareccia, (1999) claimed the low-wage service JG employment produce skills which are of little benefit to the private sector. Kadmos and O'Hara (2000) alleged that in a tightening labour market with structural unemployment, firms drive up wages to retain skilled staff, thereby maintaining unemployment in the context of inflation. But structural unemployment is a loaded term because it ignores the fact that firms adjust hiring standards across the business cycle and offer training slots as part of their recruitment strategies when labour markets tighten. Certain individuals are excluded from job/training offers by discriminating firms because they are deemed to possess undesirable personal characteristics, although discrimination reduces as activity increases (Thurow, 1976). Economists should question why these discriminative practices occur rather than perpetuate the idea of structural labour market impediments. Moreover, the JG redresses this discrimination. For instance, via regionally based job creation programmes, the JG can productively employ all workers who cannot find a private employer.

The JG also does not preclude training initiatives (see Mitchell, 1998). Appropriately structured training within a paid employment context helps overcome the churning of unemployed through training programmes, workfare and other schemes under current neo-liberal policies. Specific skills are usually more efficiently taught on the job.

As a consequence, a properly designed JG can help previously unemployed persons to make transitions into careers in the private sector and also stimulate employers to modify their recruitment behaviour.

Does the job guarantee replace unemployment with underemployment?

Related to the criticism that JG jobs are not real jobs, Sawyer (2003, p. 894) argued that the JG 'in effect constitutes unemployment by another name' because it would create jobs that are prone to underemployment. The International Labour Organization (ILO) defined two types of underemployment (ILO, 1998): a) time-related underemployment which relates to insufficient hours of work; and b) invisible underemployment reflecting an 'inadequacy of employment situations', which refers to 'situations in the workplace which reduce the capacities and well-being of workers compared to an alternative employment situation'. Situations such as 'inadequate use of occupational skills; excessive hours of work; inadequate tools, equipment or training for the assigned

tasks; travel to work difficulties; inconvenient work schedules; and recurring work stoppages because of delivery failures of raw material or energy' are indicative.

The JG eliminates time-related underemployment because JG workers voluntarily choose the hours they wish to work. In recent expansions, many OECD economies have substituted declining official unemployment with part-time jobs offering deficient hours. A full-time JG job at wages commensurate with those prevailing in the low pay private sector would be attractive to underemployed private sector workers. The JG, which provides the opportunity for workers to engage in full time employment, would also place pressure on private employers to restructure their workplaces to avoid underemployment.

However, the JG is alleged to create invisible underemployment. Sawyer (2003) surprisingly used a human capital analysis to outline three scenarios which compare the implied productivity of a JG job (q) to the 'true' productivity of the worker in an alternative job (Q). The neoclassical nature of this analysis rests on Sawyer's idea that productivity is embodied in the individual rather than the more reasonable notion that productivity results from a 'complex mix of individual capacities, team-based collaboration, on-the-job training, and job design and management' (Mitchell and Wray, 2005, p. 241).

Sawyer (2003, p. 894) characterised $q < Q$ as the general case because 'ELR jobs are low-skill, low-productivity jobs' and accordingly concluded that 'underemployment replaces unemployment'. Clearly, if the JG is to be a functional employment safety net then the available jobs have to be accessible to the most disadvantaged workers. It is empirically irrefutable that this cohort is disproportionately represented in the unemployment pool (particularly in long-term unemployment). If productivity is not an individual matter then it is likely that q will approximate Q , for most individuals who will rely on JG employment in between stints in the low-pay private labour market (see Mitchell and Wray, 2005).

In severe downturns, when unemployment impacts on the broader occupational structure it is likely that higher skilled workers will have to choose between a JG position or unemployment. If they choose a temporary JG solution then some skill-based underemployment will occur. However the output losses are less than under a NAIRU economy. Further, skilled workers are likely to opt for unemployment because they usually receive more generous redundancy payments and they may conceive a career disadvantage in taking a short-duration JG position.

Overall, the introduction of the JG is likely to align more closely to the workers' preferences for working hours than the current

NAIRU approach. As workers would be sovereign in the final number of hours they worked, it would also be easier for them to align their other commitments (family, recreational) with their working lives (see Wray, 1998).

Would the job guarantee be accompanied by an abolition of unemployment benefits and other income support payments?

Existing unemployment benefit schemes could easily co-exist with the JG and workers could be given a choice as to whether they accept income support or work in a JG job for a wage. However, Mitchell (1998), in the Australian context, advocated the abandonment of usual unemployment benefit payments once a JG is introduced, barring payment of transition income support based on an activity test. The activity test would be the availability of a JG position and once this offer was made no further access to unemployment benefits would be provided.

Sawyer (2003, p. 897) is critical of this approach and asked 'who would be required to undertake ELR employment (or otherwise receive no income) and who would, in effect, be exempt (and receive forms of income support from the State)?' However, this is not a problem specific to the JG but in fact is a basic issue in any categorical benefits system. Workers who are unable to work would have access to the other forms of state-provided income support. This form of income support is typically split into different categories such as aged pension, sickness benefit, disability support pension, and other types of payments. To be eligible for one of these payments particularly before one qualifies on age alone, individuals have to fit themselves into a relevant category. For its part, the state has to establish mechanisms to screen applicants to ensure the integrity of the pension system. Unemployment benefits are subjected to activity tests and other forms of screens. No new problem is introduced with the JG that does not already exist.

What JG does is to provide jobs to all who want to work. Most public policy today uses the stick to force able-bodied people off welfare without providing the carrot in the form of jobs.

Summary and conclusions

Given the overwhelming central bank focus on price stability we argue that the functioning and effectiveness of the unemployed buffer stock is critical to its function as a price anchor. There is overwhelming evidence that long-term unemployment generates costs far in excess of the

lost output that is sacrificed every day the economy departs from full employment.

It is clear that the more employable are the unemployed the better the price anchor will function. The government has the power to ensure a high quality price anchor is in place and that continuous involvement in paid-work provides returns in the form of improved physical and mental health, more stable labour market behaviour, reduced burdens on the criminal justice system, more coherent family histories and useful output, if well managed.

It is also the case the training in a paid-work environment is more effective than contextually isolated training schemes, which have become the fashion under the active labour market programmes pursued by governments in all countries over the past two decades.

So, it should be clear why public sector job creation in the form of a JG should be fashionable.

Notes

1. The term *employer of last resort* (ELR) is interchangeable with the term *buffer stock employment* (BSE) and *Job Guarantee* (JG). The latter two descriptions of the approach to full employment are found in the work of Mitchell whereas the ELR terminology is used by Mosler and Wray and the US commentators. Wray now prefers 'public service employment' (PSE).
2. An unchanging nominal anchor in an inflationary environment is problematic. To avoid changing real relativities, the JG wage would grow in proportion to productivity growth. Its viability as a nominal anchor relies on the fiscal authorities reigning in any private wage-price pressures. Clearly, in a hyperinflation environment, the discipline of the JG wage would fail. Historically these episodes are rare.

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8

Capital Stock and Unemployment: Searching for the Missing Link

Alfonso Palacio-Vera, Ana Rosa Martínez-Cañete, Elena Márquez de la Cruz and Inés Pérez-Soba Aguilar

Introduction

The purpose of this chapter is to examine the proposition that capital formation is an important variable in the determination of unemployment in the US economy. Most of the literature on unemployment has focused on labour market issues, such as wage-fixing institutions, the role of welfare benefits and legal firing costs, and the quality and motivation of the labour force. However, there are other aspects to the unemployment problem that have been rather neglected. One such area is the relationship between unemployment and the capital stock. Some economists have criticized this neglect, see for example, the studies by Malinvaud (1982), Sneessens and Drèze (1986), Modigliani *et al.* (1987), Bean (1989), Sarantis (1993), Allen and Nixon (1997) and Sawyer (2002). The link between capital stock and unemployment has also been the focus of attention of several studies that make use of modern time-series analysis (see, for example, Arestis and Biefang-Frisancho Mariscal, 1998, 2000). But these authors are in a minority and the conventional wisdom seems to be that persistent unemployment is mainly due to labour market rigidities. This position is well exemplified by the work of Layard *et al.* (1991) where the NAIRU – the rate of unemployment compatible with a constant rate of inflation in the absence of transitory supply shocks – is unaffected by technical progress as well as by changes in the aggregate capital–output ratio. Similarly, Blanchard and Katz (1997, p. 56) argue that 'any model should satisfy the condition that there is no long-run effect of the level of productivity on the natural rate of unemployment.'

But the absence of such a trend in unemployment over very long periods does not imply that unemployment may not exhibit a trend over shorter periods like several decades. One source of changes in labour