Working Paper No. 213

Government as Employer of Last Resort: Full Employment Without Inflation

by
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Since WWII, it has been the stated policy of the US government to simultaneously pursue high employment and stable prices. These two goals have even been the subject of two laws, the 1946 Employment Act and the 1978 Humphrey-Hawkins Act; the latter Act strengthened the government's commitment to employment by setting a goal of "full employment", defined as an adult unemployment rate of 3% (or, 4% overall). Paradoxically, neither accepted economic theory nor practical experience appears to indicate that high or full employment is even possible with stable prices. As a result, for at least the past two or three decades, monetary policy generally has been geared toward raising the unemployment rate as a means to achieving stable prices; unemployment is perceived as the inevitable cost of price stability. Many, perhaps most, economists doubt that it is even possible to achieve anything close to a 3% unemployment rate without at the same time inducing accelerating inflation. For this reason, there has been discussion of repealing the above-mentioned acts and even a movement to replace them with a new act that would mandate only one goal for monetary policy, stable prices.

In this paper, we will argue that stable prices and truly full employment are indeed possible. In fact, the Humphrey-Hawkins Act sets the goalpost too low; we will argue that the government can guarantee a zero unemployment rate, defined as all who are ready, willing, and able to work at the going wage will be able to find a job--only those unwilling (or unable) to work at the going wage would be left without work (which are not normally counted as unemployed). At the same time, by setting this "going wage", the government will provide a price anchor that will impart some price stability to the system. We do not claim that this policy would cause any particular price index to remain constant over time (and indeed would not favor any policy that would attempt to achieve this result). The proposed policy would still allow market (and other) forces to impact both nominal and relative prices. However, the point is that the proposed full employment policy would not generate the sort of inflationary pressures that many economists believe must result from policies that generate high employment. Thus, "inflation"--defined as persistent increase of some price index--could certainly co-exist with our proposed full employment policy, but would not be caused by the policy. Whether or not absence of inflation, so defined, is desirable is beyond the scope of this paper. However, we will show that a true full employment policy is not, in itself, "inflationary" and indeed could reduce inflationary pressures under some conditions. Further, the full employment policy would help to reduce economic fluctuations (the "business cycle") through a powerful built-in automatic stabilizer feature (although we certainly make no claim that this would be sufficient to eliminate business fluctuations, nor are we certain that such would be desirable).

Before proceeding, it is necessary to admit that our proposed policy could to lead to an increase of government spending; indeed, a persistent government deficit could result. However, we do not view this result with horror--as would many economists. Some "liberal" economists and policy makers would be willing to accept more government spending and larger deficits if these could achieve full employment without causing accelerating inflation--even while they believe that bigger government and larger deficits necessarily negatively impact the private economy, they would be willing to accept this "trade-off" if full employment could be achieved. Others would reject this argument, arguing that the negative impacts of larger deficits outweigh any benefits of full employment. Our line of argument is different. Here, we take the position that there is nothing inherently wrong with big deficits; these do not necessarily cause "crowding out", they do not "burden" future generations, and they cannot lead to "financial ruin" of the government. As we argue, all government spending is in the first instance financed by crediting a member bank's account at the central

bank, that is, government spending is "financed" by money creation. Taxes are required only to generate a demand for this money; they are never required to "finance" the government spending (which has already occurred). Bond sales are then required to "drain" reserves (that is, bonds are sold as an alternative to non-interest-bearing excess reserves) in order to hit interest rate targets. Thus, government deficits are not "financed" by bond sales, deficits do not raise interest rates and "crowd out" private investment (since the government need sell only so many bonds as necessary to achieve its interest rate target--and can set that target more-or-less anywhere it likes), and deficits do not automatically set up a stream of interest payments (since bond sales are discretionary) and even when they do, these are always met through crediting bank reserves; thus, there is no "burden" of servicing government debt. There are necessary caveats to these conclusions for the case where the government has issued debt denominated in foreign currencies--but this action is almost never required.

In our view, fear of deficit spending is irrational and should never be allowed to stand in the way of the spending that may be required to generate full employment. This is not to say that deficits cannot be too large. Once an economy is operating beyond full employment, any increase of aggregate demand (whether by government or by the private sector) might be inflationary. This has (but only rarely) been the case; a good example is the US situation during WWII, when the government purchased up to 60% of the nation's output. As we will argue below, inflationary pressures surely would have arisen because with the government's deficit, aggregate demand would have exceeded potential output; however, a combination of patriotism, rationing, and wage and price controls allowed the economy to operate well beyond full employment without generating substantial inflation. No rational observer would have argued that during the early 1940s the government should have foregone the build-up of the defense industries because it would increase government spending, cause the deficit to explode, crowd-out private spending, or cause inflation. Rather, a package of policies was developed to allow the economy to operate at the level necessary to prosecute the war.

There is no need to exaggerate the problems facing the US today; they certainly are not as serious as those faced in 1940. However, as we will argue, there are conditions today that make it easier to pursue a policy of full employment than those that existed in 1940. Most importantly, the universal abandonment of the gold standard by all of the large economies has virtually eliminated all rational barriers to deficit spending as a means to hire all of the unemployed. Thus, while solving the unemployment problem may not qualify as the "moral equivalent of war" (Carter's MEOW) in terms of its importance, neither is the solution to the unemployment problem so difficult to implement as was the implementation of the "war economy" of the 1940s. Fortunately, full employment can be achieved, now, without war-time controls such as rationing and wage and price controls that would excessively reduce the level of freedom that is expected by the public during normal, peacetime, periods.

In the next two sections, we turn to the two primary components of the proposal: the government would
a) act as employer of last resort, and
b) exogenously set the "marginal" price of labor. In later sections, we will examine the general theoretical background and other implications of the proposal. While the focus of this paper will be on the implications of a government-as-employer- of-last-resort policy, it is also necessary to briefly examine fiscal and monetary policy more generally. Given space constraints, it will only be possible to briefly summarize our alternative view of government deficits, the purpose of taxes and bond sales, and the purview of monetary policy. As necessary, we will refer interested readers to more detailed treatments of these issues.

Government as Employer of Last Resort

The first component of the proposal is relatively simple: the government acts as the employer of last resort, hiring all the labor that cannot find private sector employment. As Minsky said

The policy problem is to develop a strategy for full employment that does not lead to instability, inflation, and

unemployment. The main instrument of such a policy is the creation of an infinitely elastic demand for labor at a floor or minimum wage that does not depend upon long- and short-run profit expectations of business. Since only government can divorce the offering of employment from the profitability of hiring workers, the infinitely elastic demand for labor must be created by government. (Minsky 1986, p. 308) We will call this the Employer of Last Resort (ELR) policy. As will be discussed in the next section, the government simply announces the wage at which it will hire anyone who wants to work in the public sector, and then hires all who seek employment at that wage. We will call this the basic public sector employment (BPSE) at the basic public sector wage (BPSW). Of course, there will still remain many (non-BPSE) jobs in the public sector that are not a component of the ELR and that could pay wages above the BPSW. It is also important to emphasize that ELR policy is not meant to substitute for current public sector employment (BPSE workers should not displace current public employees).

The implications for wages and prices, in general, will be explored below. Here we only discuss the implications for employment and the government's budget. For the sake of our discussion in this section, we will assume that the government's announced wage (BPSW) is $6.25 per hour or $12,500 per year for full-time (BPSE) employment. We will also assume that this is a "living" wage, and that it is the legal minimum wage that exists at the time the ELR program is implemented. As we briefly discuss below, careful analysis should be undertaken before establishing the BPSW. There is no reason why some individuals might not be allowed to work part-time. However, we will assume throughout that employment is full-time to simplify calculations.

This policy will as a matter of logic eliminate all unemployment, defined as workers willing to work at the going wage but unable to find a job even after looking. Certainly there will still exist many individuals--even those in the labor force--who will be voluntarily unemployed: there will be those who are unwilling to work for the government (perhaps at any wage!), those who are unwilling to work for the government's announced wage, those who are between jobs and who would prefer to look for a better job while unemployed, and so on. For well-known reasons, it is not optimal (either socially or individually) for each individual to be fully employed--voluntary unemployment can be rational. Thus, our only concern is to ensure that all those ready, willing, and able to work at the government BPSW wage will be able to obtain a job at that wage. We define this as a state of full employment, or zero unemployment.

One implication of the ELR is that much social spending that is currently targeted to the unemployed might be reduced or eliminated. For example, unemployment compensation currently provides some income replacement for those who are unemployed. The program has only partial coverage (many of the unemployed are not covered), limited benefits (determined in part by income earned while employed), and time limits, and pays people for not working (generating obvious incentive problems). If instead, unemployment compensation were replaced with government employment, all of the disadvantages of unemployment compensation would be eliminated: coverage potentially would be universal (obviously, some unemployed would opt out of the program--and slavery is unconstitutional), there would be no time limits, no one would be paid for not working, and pay would be equalized (for the BPSE jobs).

A less extreme change would allow newly unemployed workers the option of engaging in full-time job search in the ELR program for a specific period of time, for example, for a period of six weeks. If a job was not found within this time frame, the individual would undergo counselling and assessment to determine whether continued full time search was warranted; alternatively, retraining or education might be indicated (for example, if the individual's skills did not match job opportunities). In this case, the individual might be placed into a full-time BPSE job to obtain on- the-job training; or, the individual might be enrolled in a part-time or full-time educational program. Again, there could be time limits for such programs; at some point the individual would be placed into an appropriate BPSE job. As the primary goal of BPSE is to prepare workers for employment in non-BPSE jobs (whether public or private employment), all BPSE jobs should contain at least some training. Thus, ELR could provide something similar to "unemployment compensation", but would differ from the current program in three significant ways. First, coverage could be universal (eg: all newly

unemployed would qualify, regardless of the reason for unemployment); second, the job search would be more closely monitored and assisted (for example, each ELR worker in the job search program would be expected to devote a full eight hours each workday to job search--phoning for interviews, developing a cv, completing applications, and attending interviews); and third, the "unemployment compensation" would be equalized (each would receive $6.25 per hour). Clearly, some newly unemployed workers would "opt out" of the ELR program, either because they have negotiated sufficient privately-supplied unemployment benefits (or severance pay), or because they have amassed sufficient savings to enable them to pursue full-time job search. We are concerned only with those who would voluntarily choose to participate in the ELR program.

In addition, at least some spending on other types of social programs could be reduced, such as General Assistance (state-run programs for indigents), Aid to Families with Dependent Children, and Food Stamps. Obviously, the ELR policy is not a substitute for these programs-- many individuals currently receiving such assistance are not (and probably could not be) in the labor force. Exactly who would be forced out of these current programs and into the ELR program is a subject of social policy but is beyond the scope of this study. We emphasize again that our concern is with those who are ready, willing, and able to work, but who are not able to find a job.

The ELR will also eliminate the need for a statutory minimum wage, as the BPSW will become an effective minimum wage. Indeed, it will have complete coverage, unlike the current minimum wage law, as any worker can always choose to accept BPSE. (As Hyman Minsky always argued, if there is any unemployment, the effective minimum wage is zero; it is impossible to have effective minimum wage laws except in the absence of unemployment.) The implication of ELR and the BPSW for the private sector wage is the subject of the next section. Note that an ELR program could also provide a path to de facto universal health care coverage. If the BPSE compensation included health care benefits, then private sector jobs would also have to provide health care benefits (or a salary sufficient to induce workers to forego such coverage). Obviously, ELR does not have to include such benefits, and our calculations below will not include costs of such benefits, but this would be one way to induce firms to provide health care benefits without actually mandating that they do so.

If we assume that in the current economic environment, 8 million unemployed workers (not all of whom would be officially counted as unemployed) would be willing to accept the BPSW in BPSE jobs, the total wage cost to the government would be $100 billion. However, there would be reductions of other kinds of spending to partially offset this cost. In 1996, for example, the government spent about $50 billion on unemployment compensation, $15 billion on AFDC, and more than $20 billion on food stamps; in addition, state governments spent billions on General Assistance and many other billions were spent on programs that provided assistance to the poor (housing allowances, medical care, disability payments, the Earned Income Tax Credit, and so on). The ELR could potentially eliminate all of the unemployment compensation and at least some of the other social spending (particularly on the assumption that the BPSW is a "living" wage). In addition, in 1996 millions of full-time workers earned less than $12,500 per year in private (and public) employment; many of these would leave their jobs to accept BPSE at the BPSW. Of course, private and public employers would respond with higher wages in an attempt to retain these workers. These higher wages, in turn, would reduce social spending on privately (and even publicly) employed workers (such as for food stamps, which currently go to more than 10% of the population, and the Earned Income Tax Credit--which is essentially a negative income tax linked to low income), which are required because so many jobs currently pay less than a living wage. Still, the net effect would probably be some gain of BPSE so that total BPSE would rise somewhat above 8 million. It seems reasonable to assume that the net cost of ELR to the government would fall between $25 billion and $50 billion (total expenses in excess of $100 billion, with savings in excess of $50 billion). Note that we are not including a variety of possible social and private benefits associated with lowering unemployment rates. For example, it is widely recognized that long term unemployment contributes to crime, child abuse, divorce, loss of human capital, and other social and private degradation (including insecurity even of the employed) that may be hard to economically value. Certainly unemployment is only one of the factors that contribute to such problems, however, there should be no doubt that substantial economic benefits should be generated from elimination of involuntary unemployment.

Because these are so difficult to calculate, we will ignore them here. We will assume that the deficit would rise by a net $50 billion, with the ELR program employing 8.5 million workers in BPSE at the BPSW. This is a "back of the envelop" calculation, but nothing of substance would change in our analysis even if costs were two or three times greater (or half as much)--economically it would not matter, although it might matter politically.

Obviously, the budgetary effects of the ELR are quite small, relative to the size of the Federal budget, to the size of the Reagan or Bush deficit, and to the size of GDP. We won't provide a detailed rejoinder to the "deficit-busting" arguments of those who advocate balanced budgets. An important question, however, concerns the impact this program would have on aggregate demand: is full employment going to increase aggregate demand sufficiently that accelerating demand-pull inflation would follow? Alternatively, is desired net saving sufficiently high to absorb the additional government deficit spending without generating accelerating inflation? The answer is easy to obtain. If in the absence of ELR, public plus private sector spending provides a level of employment that leaves 8 million workers involuntarily unemployed, this must be evidence that the desired net saving position of the population is higher than the actual net saving position generated by the government's deficit. For if the desired net saving position were lower, the population would be spending more and creating more jobs for the unemployed. Indeed, existence of involuntarily unemployed workers is de facto evidence that desired net saving exceeds actual net saving. This means that the government can safely increase its deficit spending, lowering involuntary unemployment, to satisfy the excess desired net saving of the population. So long as additional government deficit spending does increase employment, this must be evidence that desired net saving still exceeds actual net saving. Of course, the ELR program is designed to ensure that the deficit will rise only to the point that all involuntary employment is eliminated; once there are no workers willing to accept BPSE at the BPSW, the deficit will not be increased further. Thus, the design of the ELR guarantees that the deficit will not become "excessive", that is, will not exceed desired net saving.

It might be objected that as the government implements ELR and begins employing some of the 8 million unemployed, this will raise aggregate demand and thus increase private sector employment. This, of course, is true and is desired as it will ultimately reduce the amount of BPSE required. By stimulating demand (through the "spending multiplier"), ELR may find that only 4 million workers will eventually accept BPSE. Still, ELR automatically operates to ensure that the deficit spending attributable to ELR is at the correct level to equate desired and actual net saving, since every private sector job created automatically reduces BPSE by approximately one job and the deficit by at least the cost of an ELR job (and probably more as tax revenues rise and government spending falls).

This should eliminate the fear that a full employment policy must necessarily generate excessive demand-pull inflation. Of course, it can still be objected that full employment and the BPSW will generate cost-push inflation by placing pressure on wages and thus costs and prices. In the next section we will examine the second part of the proposal: exogenous wage setting by the government.

The BPSW and Exogenous Pricing

The size of the deficit spending necessitated by the ELR intervention will be "market determined" by the desired net saving position of the public (as discussed, this might be modified through any "spending multiplier" effects as ELR is implemented). However, the price paid by the government for BPSE is exogenously set--for the purposes of our exposition, at $12,500 per year per worker. Thus, while the quantity "floats", the price is fixed. What are the implications for prices and wages?

Clearly, with a fixed price, the government's BPSW is perfectly stable and sets a benchmark price for labor. Some jobs might still pay a wage below the BPSW if they are particularly desirable (for example, because the work is pleasurable, or where large wage increases are possible for a lucky few--as in sports or the arts). However, low wage jobs which pay at or below the BPSW before the ELR is implemented will experience a

one-time increase of wages (or will disappear altogether). It is to be expected that employers will then be forced to cover these higher costs through a combination of higher product prices, greater labor productivity, and lower realized profits. Thus, some product prices should also experience a one- time jump as the ELR program is implemented. If the BPSW is set at the statutory minimum wage, and if this minimum wage had universal coverage before ELR, then low wage private sector jobs will experience only minimal impacts--private wages need rise only sufficiently to make private sector employment preferable to BPSE. In short, at the low end of the wage scale, implementation of ELR might cause wages and the prices of products produced by these workers to experience a one-time increase. This one-time jump--no matter how large it is--however, is not inflation nor can it be accelerating inflation as these terms are normally defined by economists.

Still, it can be argued that other wages are likely to also rise because by achieving full employment of labor, the threat of unemployment is removed, emboldening workers to demand higher wages--this is essentially the old "reserve army of the unemployed" argument. Workers who might have previously earned $13,000 per year now demand $13,500, knowing that in the worst case, they might be fired if they are too obstinate--but this would then lead to a BPSE job at a loss of only $500. By extrapolation, it might be believed that all workers would harden their positions, causing wages to jump upward. Prices would move upward to the extent that higher labor productivity and lower profits could not absorb the entire increase of wages. However, again, this is a one-time jump that is not defined as inflation, unless it can be argued that all workers above the $12,500 threshold continuously raise wage demands over time (generating a "wage-price spiral). This makes little sense. The marginal $13,000 a year worker who decides to demand $13,500 per year on the calculation that this is worth the risk of losing her job and $500 per year pay (to take the BPSE job) will not face the same decision once she is a $13,500 per year worker demanding $14,000--for now the loss is $1000 per year in the worst case. It is hard to see how the guaranteed $12,500 per year job will cause any individual worker to continually increase her wage demand through time, because as she gets further from the $12,500 benchmark, her potential loss due to obstinacy rises.

Of course, it is possible that the aforementioned $13,500 per year worker might calculate that if her wage demands are not met, she will fall back to a $13,000 per year job rather than the BPSE--displacing some $13,000 per year worker to the BPSE--in which case the expected loss is again only $500 per year. In this way, it might be supposed that continuous wage pressure is applied as workers move up the wage ladder, expecting to fall back only one rung rather than all the way to the BPSW. However, if we can assume that wages and jobs can be loosely sorted by labor productivity, then this is not likely. Essentially, the government's BPSW determines the wage for the lowest productivity group--the pool of unskilled and semi-skilled workers during periods of normal demand. Those workers whose productivity is substantially above $12,500 per year will find jobs in the private sector; those with lower productivity will find BPSE. When private demand is below normal, the government will find the average productivity of its BPSE pool rising as workers are laid off in the private sector; when private demand is above normal, workers whose productivity was formerly too low to induce private hiring will leave the BPSE pool, lowering average productivity of this pool. At normal levels of private demand, then, workers in the private sector have a productivity that is above that warranted by a salary of $12,500.

Given that the relation between wages and productivity is loose, some ratcheting upward of individual wages after the ELR policy is adopted is possible. However, just as workers have the alternative of BPSE, so do employers have the opportunity of hiring from the BPSE pool. This is the primary "price stabilization" feature of the ELR program. If the wage demands of workers in the private sector exceed by too great a margin the employer's calculations of their productivity, the alternative is to obtain BPSE workers at a mark-up over the BPSW. This will help to offset the wage pressures caused by elimination of the fear of unemployment. The ELR pool will operate as a "buffer stock", and just as a buffer stock of any commodity can be used to stabilize its price, the government's labor "buffer stock" will help to stabilize the price of non-BPSE labor to the extent that workers in the ELR pool are substitutes for non-BPSE labor.

It must be remembered that the BPSE workers are not "lost" as a reserve army of potential employees; rather, they can always be obtained at a mark-up over $12,500 per year. In the absence of ELR, these workers can be obtained at a mark-up over the value of the package of social spending and private income obtained when unemployed (unemployment compensation, food stamps, under-the-table work, handouts, etc); this mark-up, however, is likely to be higher than the markup over $12,500 since it must be sufficient to make employment preferable over idleness. Further, recent work has tended to place a high rate of "depreciation" on idle human capital; the productivity of workers falls quickly when they are unemployed, and beyond some point, they probably become unemployable (due, for example, to loss of the "work habit"). With an ELR policy, however, those who are not employed in the private sector continue to work, thus, will not depreciate so quickly. Indeed, social policy could actually be geared toward enhancing human capital of the BPSE pool. This would reduce the productivity-adjusted cost of hiring BPSE workers relative to unemployed workers, and thereby diminish inflationary pressures.

Indeed, it is hard to imagine that true full employment with an ELR program would be more inflationary than the current system. The current system relies on unemployed labor and excess capacity to try to dampen wage and price increases; however, it pays unemployed labor for not working, and allows that labor to depreciate and in some cases to develop behaviors that act as barriers to private sector employment. Social spending on the unemployed prevents aggregate demand from falling excessively, but little is done to promote aggregate supply (or, growth of potential output). With ELR in place, however, labor is paid for working, which can lead to production of publicly supplied goods and services, can promote efficiency of the private sector (if, for example, BPSE generates productivity-enhancing public infrastructure) and reduce private sector costs (for example, by reducing crime), and can increase the education and skills of ELR workers (compared with education and skill levels of the unemployed). Thus, ELR might increase aggregate supply (or potential output) and thereby place downward pressure on prices, rather than causing inflation.

The buffer stock aspects of ELR generate "loose" labor markets even as they ensure full employment. This stands in stark contrast with "Keynesian" demand management policies that were designed to "prime the pump" with aggregate government spending that would increase private demand sufficiently to lower unemployment to the "full employment" level. The danger was that this would lead to such "tight" labor markets that inflation would be generated long before full employment could be reached. Indeed, most economists today believe that Keynesian policy proved to be a "failure" precisely because the tight labor markets did generate unacceptable levels of inflation. ELR is not subject to the same critique, for it allows loose labor markets even at full employment. If the ELR pool shrinks too much in an expansion so that it cannot act as a buffer stock, the government can either raise taxes or reduce non-ELR spending to replenish the buffer stock. Thus, aggregate "fine tuning" would operate through increases or decreases of the buffer stock, rather than by causing unemployment.

There are thus two conclusions that follow. If the ELR is put in place, it is not at all clear that this will be inflationary in the sense of generating continuous pressure on wages and prices. Wages might indeed experience a one-time increase because the $12,500 plus mark-up that is required to hire workers of the lowest productivity rank might exceed the value of the social spending package plus mark-up that is required to hire unemployed workers in the absence of ELR. Workers of higher productivity might become more obstinate in their wage demands so that other wages also ratchet upward. However, against this tendency is the likelihood that BPSE will reduce loss of human capital, and even the possibility that BPSE will increase human capital of workers who are temporarily unneeded in the private sector. When demand for private output rises sufficiently that these are needed, the somewhat higher cost of BPSE workers under ELR relative to the cost of unemployed workers in the absence of ELR is offset to some extent by higher productivity--reducing any pressures on prices. Further, because unemployment compensation would no longer be needed, there would be no need for experience-rated unemployment insurance taxes on firms. This means that those firms that typically have volatile demand for labor (those subject to seasonal or cyclical demand) would experience a reduction of overall labor costs--which would again tend to offset some of the higher wage costs. Finally, an ELR program could increase potential output (or "aggregate supply") by

providing higher skilled labor and greater public infrastructure. Thus, even the one-time jump of wages and prices might be quite small.

We make no claim that this ELR policy will stabilize the overall price level, thus, it is not a close substitute for an "incomes policy" or more formal wage and price controls. However, the BPSW will serve as a benchmark for a more-or-less homogenous "standard" labor input. So long as the government keeps the BPSW at $12,500, employers can always obtain workers from this pool at that price. As discussed above, this is the private sector alternative to hiring workers of greater skill at "market determined" wages. When the "market determined" wage rises to a level that so exceeds productivity-adjusted value of labor employed, there is an incentive to substitute workers from the BPSE pool, which serves as the alternate "reserve army" to help dampen wage demands. For this reason, the BPSW will continue to provide an "anchor" for market wages.

Some economists (including Keynes) have noted that there really is no labor market; labor is not like other commodities because it cannot be owned, it cannot be stored, and it is not nearly so mobile as other "factors of production" typically are. (See Galbraith 1997.) In addition, there are considerable "information costs" and uncertainty involved in hiring workers. The ELR program will resolve or reduce some of these difficulties. In a sense, the BPSE allows "storage" of labor--when it is not needed by private employers (or non-ELR public employers), it can be "stored" in the ELR buffer stock pool. ELR employees will at a minimum be able to provide employment records to potential employers; if ELR is well-administered they will also have records of education, formal training, and on-the-job training obtained in their BPSE. In a sense, the government will act as a "market maker", creating a market in labor by standing ready to "buy" unemployed labor at a fixed price, or to "sell" (provide it to non-ELR employers) at a mark- up over the BPSW. As is the case in all buffer stock schemes, that commodity used as a buffer stock is always fully employed. It also always has a very stable price, which cannot deviate much from the range established by the government's announced "buy" or "sell" price. What we are proposing to do is to "make a market in labor" by establishing a "buffer stock of labor". This is the "trick" that allows us to obtain full employment and stable prices.

From time-to-time, there will be pressure for an upward revision of the BPSW. As the overall price level will not be held constant, and as there are substantial forces in modern capitalist economies that generate trend increases of the price level, the "real" (inflation-adjusted) BPSW will fall over time--generating a need for an adjustment. In addition, there will be obvious pressures by labor to raise the BPSW--just as there are pressures currently to increase the minimum wage. When the government raises the BPSW, this in effect devalues the currency by redefining the amount of services that must be provided to the government to obtain the means of paying taxes. For example, an increase of the hourly wage from $6.25 per hour to $7.50 per hour reflects a 20% devaluation of the currency. Again, other wages (and prices) will also adjust upward to reflect the devaluation--but there is no reason to suppose that this will be "inflationary". Rather than "causing inflation", the devaluation will merely take account of inflation that results from factors that have little to do with the ELR policy.

This is not the place for an evaluation of alternative methods of obtaining "price stability". We only wanted to counter the belief that any policy designed to achieve high or full employment must generate accelerating inflation. As we have shown, the ELR will achieve what most economists would call zero unemployment (well beyond what they would call full employment) without inflationary pressures. The government will define the currency by setting the price of standard labor--this is might initially devalue the currency (although it would be possible to appreciate the currency by setting the BPSW below the current cost of hiring unemployed labor-- say, at $5000 per year, and it is possible that BPSE could increase potential output sufficiently that the currency would be devalued even if the BPSW were set at the prevailing minimum wage)- -and periodic redefinition is likely. The government would make no attempt to stabilize other prices--for example, the price of high skilled workers, or the prices of output of the private sector--under our scheme. We believe that the ELR policy would probably result in greater price stability than is currently the case--but that is not a primary claim of this paper. We need only show that truly full employment can be

achieved without generating more inflation pressures than exist under the current system.

Indeed, we would not favor policies such as wage and price controls, which are designed to undermine ("free"?) market allocation by price. While we certainly don't accept any simplistic view that perfectly flexible prices "efficiently" allocate resources through demand and supply scissors, we do appreciate many of the benefits of market and "extra-market" price determination. For example, among the most important benefits of achieving market power is the influence this gives over price. Market power makes long-term investment in expensive, firm-specific capital spending desirable--even possible. Government-administered price controls would move this power from the firm to the political process. It is not clear that this is superior in terms of enhancing the incentives to invest, nor is it clear that this would lead to greater price stability. If one believed that any full employment policy necessarily generates continuous price pressure, then one might be willing to accept the disadvantages of wage and price controls in order to achieve full employment. However, ELR can achieve zero unemployment without generating inflation. Even if the ELR did not increase price stability, we would prefer continued instability of prices-- such as that experienced since WWII--over wage and price controls.

In conclusion, the ELR policy is not likely to induce inflation--much less to cause accelerating inflation--even if it does cause prices to rise when implemented and each time the BPSW is raised. However, the magnitude of the pressure on prices is attenuated by the likelihood that ELR will preserve and even increase productivity of the "reserve army" BPSE workers who would have been unemployed in the absence of ELR. Further, reduction of or elimination of employment taxes related to the unemployment insurance program will also attenuate pressure on prices, as will reduction of private and social costs of unemployment (for example, reduction of crime will lower business costs). Finally, the "price anchor" of the BPSW may impart a greater degree of stability to wages by setting a well-known wage for homogenous, "standard" "buffer stock" labor that can always be used by private employers as an alternative to higher-skilled workers with "market determined" wages.

The ELR and Modern Money

All modern economies have abandoned a gold standard and adopted a "fiat money" standard in which the liabilities of the government (in the US, treasury coin and Fed notes and bank reserves) serve as the "ultimate" money. In all modern economies, the government "spends" by issuing fiat money, which ends up in the hands of the public as cash holdings and in the banking system as bank reserves. As has long been recognized by some economists (from Adam Smith through J.M. Keynes), "fiat money" will be accepted by the public in payment for goods and services it provides to the government so long as the government accepts this same fiat money in payment of tax liabilities. That is, it is the tax liability that creates a "demand" for fiat money; there is no need for a "precious metal" backing because modern money is "backed" by the taxes the government imposes. If a government can create at will the money that the public willingly offers goods and services (especially labor services, for our purposes here) to obtain, then the government's spending is never constrained by narrow "financing" decisions. The government can offer to hire all unemployed workers at any price it chooses, allowing the government deficit to float as high as necessary to ensure that unemployment is eliminated. Nor is there any significant problem experienced should the government decide to raise the BPSW (which will not only increase the cost per worker, but is likely to increase BPSE), and thereby increase the deficit. So long as the money is a fiat money, the government faces no narrow "financial" constraint. As discussed, the public accepts the fiat money because it can be used to pay taxes; thus, so long as the government maintains a sufficiently large tax burden, the public will accept the fiat money offered in exchange for labor services. This argument, in some sense, supersedes all other arguments against the conventional view that government budgets must be balanced.

In all likelihood, the demand by the public for the fiat money will exceed the tax liability as the public will desire to hoard some fiat money as net saving. Above, we linked the existence of unemployment to a desire for net saving that exceeded the government's deficit. The government can safely increase its spending, while

holding taxes constant, up to the point where the deficit equals desired net saving at zero unemployment. It is possible to continue to increase the deficit beyond this point (either through spending on programs other than ELR, or by increasing the BPSW), which will also cause desired and actual net saving to rise (as incomes increase beyond the full employment level--eg: by generating overtime work or by bidding up private wages). However, this would also have the effect of generating inflation, or, devaluing the currency (domestically). Increasing spending on non-ELR programs to raise the deficit beyond the level of desired net saving will generate "excess demand" inflation; raising the BPSW will devalue the currency even if desired net saving has not been reached.

There is, then, an equilibrium at zero unemployment, where desired net saving equals actual net saving, which equals the deficit (ignoring the foreign sector). If, for example, desired net saving exceeded actual net saving and the deficit, this would be reflected in a deflationary reduction of private spending and employment, causing the deficit to rise (through ELR spending), and increasing actual net saving until it had risen to equality with desired net saving. If, however, desired saving were less than actual saving, private spending and employment would rise, reducing BPSE and ELR spending, causing the deficit and actual saving to fall until it equaled desired saving. The ELR program thus imparts a great deal of stability to aggregate spending and employment by acting as a powerful automatic stabilizer--much more powerful than previous programs such as unemployment compensation or welfare spending, which were not designed to allow government spending to "float" sufficiently to eliminate all involuntary unemployment.

Still, ELR will not eliminate the business cycle. When private expectations are low, desired net saving rises, and $40,000 per year workers lose their jobs. These jobs are replaced by BPSE at $12,500 per year. The deficit increases but not by so much as the private spending that is lost. The combination of a rising deficit (thus, rising actual net saving) and falling aggregate income (which might lower desired net saving, if it is linked to income) restores an equilibrium (desired net saving=actual net saving) without unemployment--but at a lower level of aggregate activity. When private demand expands (or, desired net saving falls), leading to creation of high wage private sector jobs, these replace BPSE, raising aggregate income. Equilibrium is restored at zero unemployment, a lower deficit, lower actual and desired net savings, and a higher level of aggregate demand. Thus, the business cycle persists, but with smaller amplitude.

Why Full Employment Policy Requires Fiat Money

There is another consideration that is related to the arguments of the previous section. If the currency issued by the government were "backed by" and made convertible into a precious metal (or anything else) of relatively fixed supply, then the ELR proposal becomes impossible to implement during times of crisis. The government would fear that if it were to hire all those unemployed and allow its deficit to float, then there could always be a run on its currency as the public attempted to convert government money to, say, gold. Even though the government could try to supplement its gold reserves (for example, by raising interest rates in an attempt to cause a positive flow of gold from foreign sources), any level of backing less than 100% would still expose it to the danger of a run. Alternatively, the government might devalue the currency by reducing the conversion rate--however, this would be more likely to generate a run due to expectations of further devaluation than it would be likely to prevent a run. Thus, a gold standard (or any other standard which involves a promise to convert money on demand to a relatively scarce reserve) is not compatible with an ELR. Indeed, the ELR would expose the government to the greatest risk precisely when it was most needed, that is, during a collapse of the private sector of the economy.

This was the experience during the Great Depression. The low level of aggregate demand and high level of desired net saving resulted in a peak unemployment rate of 25% in 1933, and that remained high for the whole decade (unemployment was still 15% as late as 1941). Many New Deal policies were put into place to promote employment and to raise aggregate demand. However, work relief (such as programs directed by the Works Project Administration) never reached more than 40% of the unemployed, and government deficits were never enough to restore sufficiently robust economic growth. The largest Depression-era deficit

achieved came in 1934, when it reached 5.9% of GNP. Rather than leading to the recognition that even larger deficits were required, the experience of 1934 led to calls to balance the budget. Indeed, President Roosevelt campaigned in 1936 to do such, which was accomplished in 1937, generating a large rise of unemployment (from 14.3% to 19.1%). The government spending of the 1930s was thus never sufficient to pull the economy out of the depression; indeed, the peak federal government (nominal) spending of the 1930s was less than half the spending of 1919. Social spending during the depression was primarily "paid for" by other spending cuts, rather than by deficit spending. As a result, it could never provide the net saving desired by the public, thus, it could never provide the employment opportunities necessary to significantly reduce the unemployment rate.

Part of the reason for the reluctance to deficit spend was the convertible nature of the currency. It has always been common for governments to abandon convertibility during a crisis. As a domestic gold drain began in 1934--as dollars were converted to gold--the government abandoned convertibility domestically. Americans would never again be allowed to convert dollars to gold. An international gold drain also occurred, which was part of the reason that the Fed felt obligated to maintain higher interest rates than might have been consistent with stimulating domestic demand. However, the US did not discover the solution to the Depression until WWII broke out: the government abandoned gold convertibility altogether and engaged in massive deficit spending. The two actions were linked: the tremendous deficits would not have been thought possible if the currency could be converted to limited gold reserves.

During WWII, the deficit rose as high as 31% of GDP--or more than five times the highest ratio achieved during the Great Depression--as the government purchased up to 60% of the nation's output. Unemployment fell below 2% by 1943, and a national campaign greatly expanded the labor force (as women came into the labor force in large numbers). What had not been "financially" possible during the Great Depression suddenly became possible. No doubt the deficit greatly exceeded desired net saving, however, as discussed above this did not generate significant inflation due to a combination of rationing, wage and price controls, and patriotic net saving (even with exceedingly low interest rates; for example, the short term government borrowing rate was 3/8 of one percent). There was no fear that either a run on currency or retiring government debt would lead to loss of gold reserves as the promise of convertibility had been removed. For all practical purposes, this allowed unemployment to disappear.

After the war, the government returned to convertibility--but only for foreign-held dollars- -and maintained a twenty-five percent backing for currency. This arrangement still constrained government deficits, for it was always possible that domestic deficits could generate an outflow of dollars to foreign holders who could demand conversion. Indeed, such was the case at the end of the 1960s and beginning of the 1970s, when fear of a run on the dollar led the government to finally abandon convertibility in 1971. Since that date, gold reserves could never again constrain deficit spending. There is no longer any major (real, as opposed to perceived) barrier to implementation of a full employment policy.

Discretionary ELR And "Fine-tuning"

With an ELR program, government fixes the wage but allows its spending to be "endogenously" determined. It could, however, try to react in a discretionary manner. For example, if the ELR pool grew a great deal, the government could cut taxes or increase spending on other programs to shrink the ELR pool; when the pool shrinks beyond some point, the government could increase taxes or reduce non-ELR spending to increase the size of the pool. Such activity could attempt to achieve a degree of stability that ELR alone could not achieve.

In a capitalist economy, depreciation of the currency domestically (that is, inflation of prices) is easier to accommodate than is appreciation (that is, deflation of prices). This is because private debts are denominated in the currency; revaluation (appreciation) increases the debt burden and raises the likelihood of bankruptcy. Thus, while the burden on private debtors is offset by increased value of financial assets of creditors during

an inflation, no one is better-off if debts are abrogated. On the other hand, devaluation of the currency benefits debtors and hurts creditors, but this is compensated to some extent by fewer bankruptcies (and perhaps by effects of price inflation on expectations). For this reason, high private demand that leads to inflation will probably lead to a government decision to devalue (that is, to increase the BPSW) rather than to attempt to re-establish the old value of the currency by "fighting inflation" through tax increases or non-ELR spending cuts. The bias will be for domestic depreciation of the currency over the long-term. Note, however, that this bias is not caused by the government's ELR policy, but rather is acknowledged after the fact by a decision to accommodate through an upward revision of the BPSW.

In a sense, the "real" value of the currency also will be constantly changing as the average productivity of the pool of BPSE workers changes. The pool will tend to contain the least productive workers. When private demand rises, the average productivity of the workers obtained by the government through the ELR program will fall as private employers bid away the most productive BPSE workers; when private demand falls, the average productivity of the BPSE workers rises. Thus, the quality of workers obtained by the government for the BPSW (eg, $12,500 per year) will continually fluctuate at the margin, causing the average quality to fluctuate. In this sense, the exchange rate between the dollar and the quality-adjusted labor available to the government (and to private employers) will vary over the course of the business cycle. From the perspective of firms, when aggregate demand is low, high quality labor can be obtained from the BPSE pool at a mark-up over the BPSW; on the other hand, when aggregate demand is high, the marginal BPSE worker will have relatively low productivity. It is this fluctuating "marginal productivity" of BPSE workers that helps to act as an automatic stabilizer because hiring is encouraged when demand is low and discouraged when demand is high. Another way of looking at it is to argue that when demand is low, the value of the currency is high because quality- adjusted labor is cheap; when demand is high, the value of the currency is low because productivity of the marginal BPSE worker is low.

Note how existence of ELR will allow the government to react in a sensible manner to the threat of unemployment caused by "downsizing", labor-saving technological advancement, or labor-displacing imports. Currently, when labor is displaced through any of these mechanisms, there is pressure on government to step in to try to prevent unemployment. For example, the government might be asked to make it more difficult for firms to lay-off employees (whether due to technological advance or foreign competition). However, once ELR is in place, displaced workers can always find BPSE jobs. Of course, it is likely that these jobs pay less than the lost jobs. On one hand, it can be argued that the social benefits of technological advance (or cheap imports) must exceed the private costs of moving from private sector employment to BPSE. On the other, one could argue that this ignores the social cost of loss of aggregate demand (as discussed above, replacing a $40,000 a year job with a $12,500 a year job lowers aggregate demand), which could exert deflationary pressure on the economy. However, the government can react to this through discretionary tax cuts and non-ELR spending increases. This means that the population as a whole benefits twice: first from technological advance or cheaper imports, and second from tax cuts or spending increases. Perhaps "free trade" and the possibility of trade deficits would not be perceived as so detrimental once ELR is implemented: a trade deficit would merely indicate that the population could enjoy "Toyotas" in exchange for pieces of paper, and could get a tax cut on top of that. It would be hoped, of course, that the tax cut and/or spending increase would then encourage the private sector to create new jobs to replace those lost to foreign imports. If that is the case, and if ELR employment can prepare displaced workers for those new jobs, then it need not be the case that even the displaced workers would be worse off.

The Elr And Implications For Reserves And Interest Rate Maintenance

When the government spends, this immediately increases bank reserves as the Treasury "writes a check" on the Fed, which is deposited by the private receiving party in her bank. When an unemployed worker is hired into the ELR program, she thus receives a Treasury check, and it is deposited into her bank, increasing the reserves of her bank. Of course, some of the created reserves will be drained to cash hoards, while other reserves will be drained through payment of taxes (credited to the Treasury's account, which reduces its

obligation to the Fed as well as the Fed's liability--reserves--to banks). The remaining reserves would create an excess reserve position for banks in the aggregate, so must be drained to prevent short-term interest rates from falling. This is accomplished through government bond sales. Thus, bond sales are necessary to allow the Fed to hit its interest rate target and are not necessary to "finance" deficit spending.

While it appears that the government must sell bonds to "finance" spending in excess of taxes, actually, the spending occurs first (on the basis of creation of fiat money, or, a check drawn on the Fed) and the bond sale comes later. The purpose of bond sales is to drain some of the created fiat money (which appear as excess reserves). This leads to a completely different view of the possibility of "crowding out", which is supposed to result from pressure on interest rates caused by government deficits. Actually, deficit spending would lower interest rates if the excess reserves were not drained through bond sales. Further, this recognition leads to the conclusion that fears that the government might not be able to "finance" a deficit through bond sales are misplaced. If the government ran a deficit, then found no buyers for its bonds, this would indicate that the public (including banks) preferred to hold non-interest-earning currency and reserves over interest-earning bonds. This is certainly nothing to be feared, indeed, it might be welcomed as it would lower the "costs" of deficit spending (since interest would not be paid). An understanding of reserve accounting thus strengthens our argument that any deficits generated by an ELR program are not to be irrationally feared.

The ELR would generate deficits that would lead to an increase of reserves; this would then necessitate bond sales to allow banks to hold interest-earning assets rather than non-interest- earning reserves (as they would otherwise drive interest rates toward zero as they attempted to rid themselves of excess reserves). Bond sales can be thought of as an interest rate maintenance operation rather than as a financing operation. This holds true in the case of bond sales "necessitated" by ELR spending. As ELR spending would be countercyclical, bond sales would also be required to countercyclically drain reserves to allow the central bank to hit its interest rate targets. Some who do not understand the purpose of bond sales might react in horror to the proposition that the government would attempt to sell bonds precisely at the "bottom" of the cycle--it might be believed that in the "best case", this would crowd-out private investment precisely when it is most needed, and in the "worst case" the government would find no buyers of its bonds. However, as our analysis makes clear, such fears are unwarranted. Bond sales, by design, prevent interest rates from falling-- so while it is true that interest rates would be lower in the absence of bond sales (but in the presence of deficit spending), the bond sales are required to keep overnight interest rates above zero. Relatedly, bond sales are usually welcomed, at least by banks, because they are preferred to zero interest earning excess reserves. Thus, there is only a small possibility that bond issues would find no buyers. If, indeed, the government found no buyers, this would merely indicate that holders of currency and reserves preferred to hold these over interest-earning bonds. This might be the case, for example, when interest rates have been pushed very low in an attempt to fight a deep recession; however, it should never be cause for alarm.

Summary, Other Issues, and Conclusion

The main issues examined in this paper concern the desirability and feasibility of an ELR program. The ELR program is desired because a) a more-or-less free market system does not, and perhaps cannot, continuously generate true full employment; b) no civilized, and wealthy, society can allow a portion of its population to go without adequate food, clothing and shelter; and c) our society places a high value on work as the means through which most individuals should obtain a livelihood. ELR policy cannot resolve all social problems; it cannot even be expected that ELR can replace all transfer spending. Some individuals will not be able to work in even an ELR program. Some individuals will not be willing to work. However, ELR will ensure that all of those willing and able to work at the BPSW will be able to obtain a job by selling their time to the government at the BPSW. Indeed, "ableness" should be defined as broadly as possible to include virtually all those who are willing to work. There is no reason to impose a narrow "efficiency" standard to ensure "productivity" above the BPSW. Any production will normally be better than no production; if one begins with the belief that even the unproductive must be supported, then the state will have to provide income whether or not one works. Generally, it will be better to have someone working. In many cases, the "net

product" may well be negative from a narrow economic standpoint because supervision, capital investments, and personal services required to put some people to work (for example, to employ severely disabled) could greatly exceed the economic value of output. However, a rich society can afford inefficiencies, and the noneconomic benefits of work can offset at least some of the economic costs.

ELR intervention is feasible. The modern government does not face "financial constraints". In this paper, we have only been able to briefly summarize the argument concerning the government's ability to run deficits incurred by an ELR program. First, government spending logically must come before payment of taxes and bond sales. This is because the public can only use "government money" to pay taxes or to buy bonds. Second, the public will offer things for sale to the government, or will work for the government, in order to obtain that which is required for payment of taxes ("government money"); the tax liability makes government money acceptable. Third, as government spending comes before bond sales, it is not possible for bond sales to "finance deficits". Bond sales must serve a different purpose. As we argued, bonds are sold to drain "government money" (bank reserves) to allow the central bank to hit its interest rate target. Interest-earning bonds are (almost always) preferred by banks over non-earning excess reserves. Thus, it would be highly unlikely that the government would "run deficits" and then find it could not sell bonds. Even if it found no market for its bonds, this would be no problem for it would indicate that markets preferred non-earning government money over earning government bonds!

Once the primary issues have been resolved, there remain many issues, problems, objections, and extensions that must be analyzed. We shall merely list a few objections that immediately come to mind, and will provide a sentence or two to indicate the direction that might be taken to resolve the problems. 1. It will be impossible to administer the program due to incompetence, corruption, racism, and opposition. Clearly, this is a significant problem; as Minsky used to wonder, are there administrators today as capable as those who administered the New Deal? Particularly after the Reagan years, when incompetent and corrupt administrators were purposely chosen to administer programs they opposed, skepticism about the ability of government bureaucrats is commonplace. However, as Paul Davidson always argues, if one begins with the premise that all politicians and bureaucrats are crooks, then policy is not possible. There is evidence that even during the New Deal, administrators in some regions discriminated in WPA employment. There is great danger that ELR jobs will be allocated in a discriminatory manner, with females and minorities allocated to the least desirable jobs. On the other hand, there is no reason to believe that the current social welfare system is free of corruption and discrimination. A civilized society must face up to and deal with these problems. We can suggest several possibilities. First, the existing unemployment benefits program administration might be used to administer an ELR program. Alternatively, administration could "devolve" to the state and local government level. The Federal government would simply announce that it would provide as much funding as necessary to let every state and local government hire as many new employees as they desired, with only two constraints: these jobs could not replace current employment, and they could pay only the BPSW. Finally, a similar offer could be made to qualifying governmental and non-governmental non-profit organizations; examples might include Americorps, VISTA, the Student Community Service Program, the National Senior Service Corps, the Peace Corps, the National Health Service Corps, school districts, Meals on Wheels, and so on. Use of existing groups would help to minimize start-up costs and duplication of administration costs. 2. ELR employment will consist of nothing but "make-work" jobs, like the WPA before it. As we move farther from the 1930s, people seem to have forgotten the contributions made by WPA. WPA workers not only built or reconstructed 617,000 miles of roads, 124,000 bridges and viaducts, and 120,000 public buildings; they also left the nation with thousands of new parks, playgrounds, and athletic fields. Moreover, they drained malarial swamps, exterminated rats in slums, organized nursery schools, and taught illiterate adults to read and write. Unemployed actors set up theaters throughout the land, often performing in remote towns and backwoods areas. WPA orchestras gave 6,000 live concerts. WPA artists produced murals, sculptures, and paintings that still adorn our public buildings. Even though it was a means-tested relief program, WPA helped sustain the talent of artists like Jackson Pollock, Ben Shahn, and William de Kooning, and of writers like Saul Bellow, Studs Terkel, and Richard Wright--as well as the dignity of millions of other people who would otherwise have been forced to remain idle. (Ginsburg 1983, p. 11)

On one hand, it can be argued that the 1930s were special because so many talented people were unemployed; on the other, it can be argued that there is no reason to suppose that there are no Studs Terkels or Hyman Minskys (another WPA employee, who estimated Cobb-Douglas production functions on the government payroll) among today's unemployed. Further, ELR is specifically designed such that the most talented and productive will work their way out of ELR. This is not a bad thing, but rather should be welcomed. It is through productive activity that the talented will prove to private employers (and non-ELR government employers) that they are indeed productive. Finally, in the worst case, ELR workers must at least "sell" their time in exchange for dollars, which many Americans might find preferable to "money for nothing". We can attempt, however, to describe some of the jobs that ELR workers might undertake; to minimize impacts on the private sector, we probably would want to undertake activities that are not currently undertaken by profit-seeking firms, nor would we want to take job prospects away from the currently employed.

Possible ELR jobs include:

*Companion Numerous senior citizens are lonely and their ranks will expand greatly in the coming years. ELR workers could serve as companions to the elderly, with each ELR companion assigned to five elderly for daily visits of an hour with each. The companion would engage in conversation, play games, and perhaps help with light chores. Each companion would also attend classes or seminars in care-giving, and perhaps also attend daily group discussions with other ELR companions. Their training would make them employable in a wide variety of private sector jobs that provide care-giving. Competition with the private sector would be minimal. Companions could also be assigned to non-elderly people: orphans, the bed-ridden, mentally or physically disabled, and so on. *Public school classroom assistant ELR workers could be assigned to public school classrooms (and also to Headstart and pre-school programs) to help teachers as appropriate, acting as reading, writing, and math tutors, to help in recreational and artistic activities, and so on. Students would benefit and so would ELR workers. While it might seem that many ELR workers would not be "qualified" due to low educational attainment, this is probably not the case, as each would need to have skills only a grade-level above that of the class to which each is assigned to be of use in tutoring. There is strong evidence that one's own skills are improved by tutoring others, thus, this would be a way to improve the educational achievement of ELR workers. ELR workers could be very valuable in classrooms with children whose first language is not english. In addition, ELR workers could take classes and seminars, earning high school diplomas and advanced degrees to better prepare them for the workplace. *Safety monitor ELR workers could be assigned to public school grounds, areas surrounding schools, and perhaps other areas (such as playgrounds, subway stations, street intersections, or shopping centers) to help maintain safety through video monitoring, serving as crossing guards, hallway monitoring, and so on. *Neighborhood cleanup/Hiway cleanup engineers ELR workers could help to clean-up playgrounds, parks, sidewalks, squares, streets, and abandoned property. *Low income housing restoration engineers ELR workers could engage in "Habitat-for-Humanity" type low income housing restoration. *Day care assistants for children of ELR workers To promote "welfare to work" programs, a tremendous increase in the number of low cost day care centers will be required. ELR workers can be assigned to such centers; some ELR workers might want to start their own centers. *Library assistants ELR workers could help in libraries, perhaps alleviating the pressure to reduce hours and services offered. New programs could be started by ELR workers, such as "story time", musical performances, and arts and crafts activities for children. *Environmental safety monitors There are a wide variety of tasks that could be assigned to ELR workers. For example, ELR workers could test for lead paint in low income communities; they could be trained to test water safety (public water supply, public beaches, public swimming pools); they could help in removal of some types of environmental contamination; and they could help in fire detection and prevention (for example, in national parks). *ELR artist or musician Just as the WPA employed artists and musicians, the existence of the ELR program would be a good way to directly and to indirectly promote the "arts". ELR artists could paint murals, participate in community art projects celebrating local people, culture and traditions; or they could perform in ELR bands. Many "artistes" disdain "normal" work and ELR jobs would provide them with a "safety net" so that they might be able to take on

greater artistic risk--knowing that if they fail to "make it" in the art world, they can fall back to an ELR job (whether or not that ELR job would make use of their talents). *Community or cultural historian ELR workers could record elders' stories, collect historical records, and write histories of communities.

Obviously, this list is not meant to be definitive, but is only to suggest that there are many jobs that could be done by ELR workers. We have not listed the more "obvious" jobs, such as restoration of public infrastructure (patching holes in city streets, repairing dangerous bridges), provision of new infrastructure (hiway construction, new sewage treatment plants), and expansion of public services (new recycling programs) that should be carefully considered because they might reduce private costs and increase private profitability. These are types of social spending that should be done even without an ELR program, and that might be better accomplished by non-ELR (including unionized) workers. However, it should be noted that WPA employees did indeed engage in this sort of work. We hope that each reader will add to the list above; we suspect that it will not be difficult to come up with a sufficiently long list to keep eight million ELR workers busy. And we believe that most readers will agree that it is better to pay people to perform jobs like those listed above, than to pay them to do nothing (or, worse still, to not pay them to do nothing!).

3. States are already implementing "welfare to work" programs; why is ELR needed? State governments cannot run continuous deficits; most state constitutions prevent deficits and, in any case, our arguments regarding deficits in this paper only apply to the government that "defines money" by deciding what it will accept in payment of taxes. Or, more conventionally, only the federal government can "create money" to finance deficits. When an economy is expanding so that state tax revenues are rising and unemployment levels are falling, "welfare to work" can meet with at least some success (although states like Wisconsin admit that "work" costs the state more than "welfare" does). However, when the economy heads into a recession, and, thus, precisely when ELR is most needed, states will find unemployment rates rising, welfare rolls rising, and tax revenues falling. They will not be able to expand spending as it is required to provide jobs for the newly unemployed. Only the federal government can finance an ELR program in the worst of times as state spending is necessarily pro-cyclical while state receipts are necessarily counter- cyclical. Many of the other benefits arising from a nation-wide ELR program that were discussed in this paper are not likely to be generated by current state programs. For example, the ELR program provides a pool of workers who are available for private hire at a mark-up over the known BPSW; state programs often subsidize private employment and can generate obvious incentive problems (firms use subsidized labor to displace current employees; firms lay-off employees as soon as subsidies run out). As state programs vary, there is no uniform "package" of wages and benefits received by those in the "welfare to work" programs. Further, states have announced they have no intention of offering a permanent job to those leaving welfare; they deny any long-term responsibility for taking care of the indigent--indeed, that is nearly a guiding principle of the "welfare to work" experiment. The ELR program would offer the promise that in the worst case scenario, one could have a life-time of ELR work. While it is not a goal of ELR to retain any employee for life, there is the possibility that some individuals will never obtain private employment, and, at the very least, ELR will force them to sell their time to obtain income. However, none of this precludes administration at the local level.

4. What can be done with belligerent/anti-social/lazy ELR workers? ELR will require that one show-up for work more-or-less on time; beyond that, requirements would have to be made almost on a case-by-case arrangement. Some workers may be difficult: they could be racist or sexist; they could be lazy; they could refuse to follow directions; and they might be emotionally unstable. Most families find ways to deal with "problem children" without banishing them from the household or forcing extreme deprivation on them. Problem ELR workers are already members of society and will have to be dealt with as best we can, and in creative ways, just as we already deal with them. Anti-social workers can be given jobs that require a minimal amount of interaction; in extreme cases, some workers might work alone at home (sorting envelopes; working on a computer). Discipline would be maintained primarily by the promise of promotion to more desirable ELR jobs, and, eventually, to private sector employment. Least desirable jobs would be given as punishment. In the worst case, some workers might be so irresponsible that their employment would be

day-by-day, or even hour-by-hour with a cash payment for a specified amount of time spent on the job. Again, in extreme cases it is likely that "narrow economic efficiency" would dictate that it would be more efficient to simply provide hand-outs; however, some efficiency might be sacrificed to the principle that income should come from work. ELR workers could be fired from their jobs for just cause; there could be conditions placed on re-hiring (for example, the fired worker might have to wait for 3 days--without pay--before re-hiring; the penalty could be increased for subsequent firings). In extreme cases, some individuals may not be allowed to work in a BPSE job; BPSE cannot provide income for all the needy.

5. What about people who are unable to work? ELR cannot replace all social spending. Leaving aside those who are unable to work due to disabilities (discussed above), some will not be able to work due to family responsibilities, low skills, or other such reasons. As a society, we might decide that single mothers with young children should be able to choose to stay home; their ELR "job" would be to care for their children. More generally, it might make sense to train (or retrain) some workers rather than to put them into unskilled jobs; their ELR "job" would be to attend school or an apprenticeship program. Some individuals, as mentioned above, might not be employable because of behavioral problems.

6. What effect will ELR have on unions? There might be a fear that government would use ELR workers to replace present employees, unionized or nonunionized. It is important to prevent this from occurring. In general, the effect of ELR on union workers should not be clearly positive or negative. On one hand, ELR removes the fear or threat of unemployment, which is often said to be an important disciplinary method used by firms against workers. It also establishes a true, universal minimum wage--below which wages will not fall. It still permits unions to negotiate benefits with employers--such as unemployment compensation (so that although there might not be any federal unemployment compensation, workers could still negotiate privately-supplied benefits). ELR could include a package of benefits, including health care. This would then set the lowest standard (and could, for example, lead to universal health care). On the other hand, the ELR pool will also dampen wage (and benefit) demands of non-ELR workers as employers will have the alternative of hiring from the ELR pool. This "buffer stock" will provide a better "reserve army" than the current pool of unemployed does. Thus, it is not clear that ELR is biased in favor of workers or employers.

7. Won't participation in BPSE lead to stigmatization? If ELR takes only those workers the private sector "doesn't want", won't participation in BPSE be seen as a negative indication of character, education, or skill level, much as participation in "welfare" stigmatizes a person? This is a danger, but the danger can be reduced through creative action. For example, ELR can be promoted as a universal "Americorps" service, open to all who would like to perform community service (unlike the current Americorp program, which limits the number of participants). We could institute a national service requirement, much as many countries require military service or national service. Alternatively, we can rely on persuasion: universities could favor applications from prospective students who have served for a year in an ELR position; not only would this provide students with savings for tuition, but it would also enable them to gain skills, training, and maturity before beginning college. Alternatively, colleges could offer "junior year programs" in ELR as an alternative to "junior year abroad" programs. Corporations could allow leaves of absence to professionals and executives to work in the ELR program as a community service. Retired executives, professionals, and politicians could serve in the ELR program (much as they now serve with President Carter in Habitat for Humanity). ELR might even provide for some part-time positions (perhaps even unpaid) for volunteers who would like to perform community service without giving up other employment. It is possible that ELR service could come to be seen as an advantage on the resume, rather than as a stigma.

8. Why worry now, when unemployment is lower than it has been for a generation? Many pundits have proclaimed that we have entered a "new age" with the "new economy"; it is claimed that things "have never been better". If true, this means that the best that can be expected is a situation in which eight million are unemployed and millions more work fewer hours than desired or are forced to patch together several jobs. It also means that "welfare-to-work" programs are doomed to fail because the best that can be done is to redistribute jobs, still leaving eight million unemployed. Finally, it means that price stability can only be

obtained at the cost of millions of unemployed. Now, more than ever, it should be clear that "free markets" cannot be relied upon. If our society values work, full employment, and stable prices, then ELR is preferable to the current arrangement.

Other objections will be raised; problems will crop up; further analysis is needed. However, if the primary issues can be resolved, then we can turn to these details.

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