
Working Paper No. 258

(Full) Employment Policy: Theory and Practice

by

[Dimitri B. Papadimitriou](#)

The Jerome Levy Economics Institute

Unemployment cannot be conquered by a democracy until it is understood. Full productive employment in a free society is possible but it is not possible without taking pains. It cannot be won by waving a financial wand; it is a goal that can be reached only by conscious continuous organization of all our productive resources under democratic control. To win full employment and keep it, we must will the end and must understand and will the means. (William Beveridge 1945, p. 16)

Introduction

Writing in the 1940s, Beveridge thought that full employment would be achieved when the number of job vacancies would be higher than the number of jobless (Beveridge 1945) a condition that would guarantee no long-term unemployment. What Beveridge envisaged was achieved in the immediate post-war years, but, alas, was not sustained during the past two or even three decades. Unlike the past three decades, however, the U.S. economy appears to currently have reached full-employment with low and stable inflation. Low unemployment rates as conventionally measured, cannot tell the entire unemployment story. The Bureau of Labor Statistics regularly reports that the flows among the categories 'officially unemployed', 'employed', and 'out-of-the-labor-force' are very large. In November 1998, for example, of those unemployed, 45% were job losers, 10.7% were job leavers, and 44.3% came from out-the-labor-force. Those who find jobs typically come from the out-the-labor-force category. Of the 68 million people in this category, 4.21 million wanted a job and only 1.2 million of them indicated a marginal attachment to the labor force and were not currently working; the rest had no attachment to the labor force. As Lester Thurow notes (1996), there are a few more million missing males who used to be in the workforce, who are not in school, are not old enough to have retired, and are neither employed nor unemployed. They have either dropped from, or dropped out of, the GNP machine of the United States. Thus, the 4.4% unemployment rate reported for November 1998 does not represent the true unemployment level for the U.S.. The unemployment landscape would look even more different if adjustments were made for the large number of the "employed" who are involuntarily working part-time (almost 3.3 million in November 1998) and who for statistical purposes are not differentiated from those working on full-time, year-round basis. While it is not possible to calculate how many more individuals could work if jobs were made available, there undoubtedly exist millions of potential workers. Finally, to make matters worse, the unemployment rate is underestimated, if the concept of "disguised" unemployment (defined as low productivity employment as compared to manufacturing productivity) is to be applied, since by and large, employment growth is not in the manufacturing sectors, but in services whose productivity lags that in manufacturing (Robinson 1937; Eatwell 1995).

This state of affairs coincides not only with the rush to deficit reduction embraced by the American, European, and Asian economies, but also with the implementation of a 'welfare reform' in the U.S. that seeks to force recipients off assistance through setting time (and other) limits on eligibility. This policy leaves it to individual states to try to find jobs for former beneficiaries, a task that they are unable -even if they were willing- to shoulder. A recent survey in New York State, for example, showed that cutting off aid will not necessarily put people to work. Imprecise as the survey may be, it still showed that a large proportion (two-thirds) of the individuals leaving the rolls of the Aid to Families With Dependent Children (AFDC) and Home Relief programs failed to get jobs (*The NY Times* , 23 March 1998,

pp. 1, B6). These individuals were left without the means to provide for themselves and their families, thereby driving them deeper into poverty rather than self-sufficiency. This is in concert with the strategy enforced by the current political infrastructure that aims to progressively dismantle the public sector social safety net that traditionally had protected the most vulnerable segments of the population against economic and other hardships.

A similar employment situation prevails in Europe, where central banks continue a policy of tight money even while many countries--within and outside the European Union (EU)-experience double digit official unemployment rates. Belgium, France, Germany, Italy, and Spain have all had unemployment rates over 10% (Germany's October 1998 rate was over 10%, while Spain's has averaged closer to 20% for over two years), and are projecting similar rates through the year 2002. At the same time, EU member states are preparing to give up their sovereignty to conduct coordinated fiscal and monetary policy by accepting the rules of a flawed European Monetary Union (EMU). The Maastricht accord sets ceilings for inflation and government deficits and debt, but not for unemployment, which, as of the end of October 1998 stood at 16.8 million individuals for the fifteen member-states. When asked about remedies to ameliorate high unemployment rates EU economics ministers respond about a type of progress identified as 'change in trend but not yet of a breakthrough' (Financial Times, 12 March 1998).

During the Great Depression, unemployment was addressed through interventionist government. These government programs were temporary, however, and with the economic recovery that accompanied U.S. entry into WW II, they were discontinued. In the Post-War era, promotion of "full" or "maximum" employment meant macroeconomic policies designed to manage aggregate demand, supplemented by selective programs, such as job training and limited income maintenance. With the onset of the 1970s stagflation, however, even the moderate approach of demand management faltered and led to a consensus among economists and policy makers that a "natural rate" of unemployment, or NAIRU, of 5 percent in the U.S. and as high as 10 percent in France, for example, would be too inflationary. This received wisdom continues to this day, so as to ensure price stability, results in millions of individuals --of the order that was mentioned earlier-- who are ready, willing, and able to work, remain idle, thereby serving as a "reserve" or "forgotten army" of labor. Two important questions, then, may be posed regarding unemployment. First, is this the best we can do at times of prosperity? Second, are we prepared to meet the challenges of the next downturn? (Worrisome signs have already appeared: equity and bond markets volatility in the U.S. and overseas, the Asian and Russian crises, unprecedented rates of household and business indebtedness in the U.S., and an obsession for meeting government budget deficit reduction targets everywhere.)

Employment Policy Options

The challenge that policymakers confront is to craft employment policies that (i) uphold the basic human right to a job that neither interferes with micro-decisions of individual firms nor relies on the failed approach of 'fine-tuning' aggregate demand, and (ii) are not inflationary. The policy also should be consistent with the fundamental premise that to the extent possible, socially-productive work is preferable to income maintenance. This would necessarily call for bold initiatives, and it has been recognized as such by a number of scholars across the theoretical and political spectrum. Many measures have been suggested. This paper analyzes those which, as of late, have received substantial currency, and are presently proposed as viable options to achieving higher employment. These include: reduction of the workweek, employment subsidies, and public service employment or the government becoming the employer of last resort (ELR).

Reduction of the workweek

Reducing the workweek or sharing available work has been introduced many times by governments and trade unions alike as, first, a mechanism to ameliorate high unemployment, and second, to provide flexibility and power sharing in the workplace. Work-sharing arrangements are not strictly limited to reducing the normal workweek, but also include other schemes, i.e., job-sharing or job splitting, elimination of overtime, phased-in retirement, phased entry through extended education and training, and in general working part-time. Working part-time was promoted in the OECD Jobs Study (1995) as a measure to increase flexibility that "could enhance job creation and employment prospects" (p. 23).

The principal argument made for implementing work-sharing arrangements is that they "redistribute work over people so as to reduce the extent of involuntary unemployment" (Dreze 1986, p. 1). Similarly, the Commission of the European Communities (EU) endorsed the measure 20 years ago; as they put it,

the aim of work-sharing is to redistribute the total volume of work in the economy in order to increase employment opportunities for all those wishing to work. This does not mean that the volume of work remains constant. Rather it is based on the observation that this volume is at present inadequate and that we must try to redistribute it (CEC 1978, p. 2).

The European Union renewed its endorsement to this employment strategy by incorporating it in the Working Time Directive issued in 1993 (European Industrial Relations Review 1993). The trading of hours for jobs scheme that results from the reduction of the normal workweek has been desirable to both employers and employees for different reasons. Employees' desires are based on what may be called the "sovereignty of time", while the employers' desires reflect changes in production schedules and product demand, and the implementation of new technology.

As Europe's unemployment rates have remained at record levels, trading hours for jobs has reappeared as a viable employment policy. This approach to employment has been favored by trade unions. In Germany, however, reductions in the normal workweek were implemented in the 1950s and 1960s with no apparent increase in employment but did establish a new normal workweek (Hinrichs 1991). Germany's economics minister, Gunter Rexrodt, has suggested that saving jobs will require shorter hours and longer holidays. Volkswagen has pushed hard for the tradeoff of a four-day workweek with a 20% wage cut or massive layoffs (Gow 1993; *The Economist*, 13 November 1993). This kind of employment policy resembles the "shock therapy" applied to Russia and the former Warsaw Pact economies, during transition, the abysmal results of which have been documented (Papadimitriou 1991).

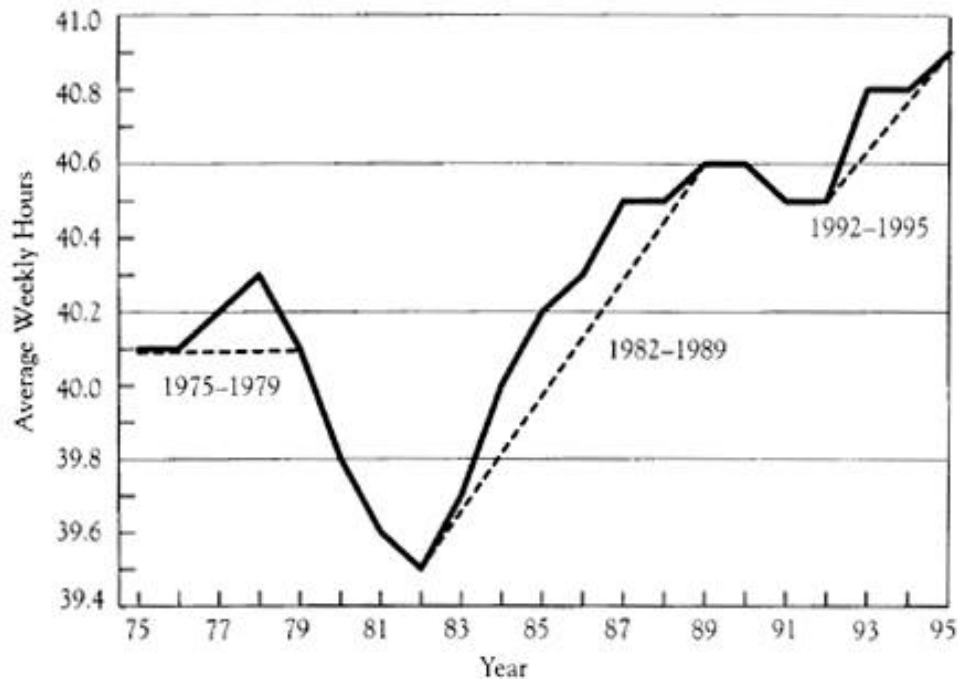
Other examples of implementing such policies abound. During the 1970s and 1980s, the Netherlands experienced high unemployment along with an increase in the labor force, which led them, in 1982 to experiment with a reduced workweek and forfeiture of pay increases. Research studies that attempted to quantify the impact of the experiment on employment growth showed no significant changes occurred, and thus indicated that reducing the workweek was "a relatively ineffective policy for reducing unemployment" (Roche, Fynes, and Morrissey 1996, p. 136). The experiences with reduced working hours schemes in Belgium in the 1980s, and in Australia in the 1970s and 1980s, when unemployment rose, further support the argument that no growth in employment occurs (pp. 137-9). To the contrary, in the case of Australia it has been shown that reduction in working hours may lead to increased overtime costs, which result in a decrease of employment (Dixon 1987).

In the United States, reduction in working hours has not been used as a strategy to increase employment. Juliet Schor in *The Overworked American* (1991) reported that Americans worked 1,924 hours in 1989 compared with 1,786 hours two decades earlier, an increase of 7.7 percent. She suggests that reducing the 40-hour workweek would lead to less absenteeism, less turnover, less personal business on company time, lower costs, and, perhaps, increased employment. As unemployment rose in the 1970s and 1980s, some labor economists and others advocated shorter workweeks to "spread the work," arguing that reducing the standard workweek would put millions of individuals to work (Levitan and Belous 1977; Morand and Macoy 1984; McGaughey 1981). In the U.S., what has been seen instead is that many employers and consenting employees have increased the workweek through overtime as a means to decrease costs (employers do not pay benefits on overtime work) and, increase income for employees in an environment of job insecurity. This phenomenon has amounted to such considerable debate involving so many aspects of employment and work hours that many question the official statistics on unemployment rates (Bluestone and Rose 1998).

Chart 1 shows the trend of average weekly hours worked for prime-age workers since 1975 (p. 34). During the last two recoveries -1982 to 1989 and 1992 to 1995- average weekly hours increased significantly without a pronounced change in the number of prime-age workers, which clearly indicates a

change in the labor supply regime, and provides an explanation of the reasons for low unemployment and low inflation we have experienced in the 1980s and 1990s. In simple arithmetic terms, if the employed labor force were about 100 million in 1982, the increase in hours is calculated to be the equivalent of 3.7 million additional workers, or a decrease of the official unemployment rate by 3.7 percent (ibid, p. 35).

Average Weekly Hours Worked, All Prime-Age Workers (Age 25-54)



Source: Author's analysis of CPS data.

Source: Barry Bluestone and Stephen Rose, *The Unmeasured Labor Force*, Public Policy Brief No. 39, Annandale on Hudson, NY.: The Jerome Levy Economics Institute, 1998

The Japanese experience with shorter working hours has been scanty. Until recently Japan's official unemployment rates have been significantly low, thus negating any interest in full employment policy. As Deutschmann (1991) put it, Japanese human resource practices are associated with a larger number of normal work hours, a lot of overtime, and fewer paid holidays than other industrial countries; moreover, there is no clear separation between time devoted to leisure and to work. During the 1990s, some significant reductions in working time have been implemented. The likely employment effects of shorter working hours have been simulated by using a simple model (Brunello 1989). The econometric results of this model show the outcome of a reduction of the workweek to be associated with an increase in overtime and reduction in employment.

Finally, the experience in France is perhaps the most interesting since there is a national belief derived from opinion polls and shared across the political spectrum, that shortening the workweek will lead to employment creation (ILO 1993). The working time policies in France have been detailed in Jallade (1991) who, contrary to the sentiment of the general public, argued that no significant employment effects were discernible from the 1980s reductions in the workweek, and if there were any, they were most likely offset by the decline in the French economy's competitiveness resulting from increased wage costs. Furthermore, he suggests that advocating the spreading of the work by means of reducing work hours may not lead to additional jobs, but, rather, to a faster pace of the workers and higher productivity. The latest attempt of Prime Minister Jospin to reduce the workweek to 35 hours as a macroeconomic policy for job creation met strong criticism by economists and trade unions alike. France

has gone ahead and instituted the 35 hour workweek, the objections and criticisms notwithstanding. Early reports indicate not only insignificant reductions in the ranks of unemployed, but projections of higher unit costs.

The work-leisure allocation is important in our lives and economy, and it could be argued that reducing the workweek will solve a number of social problems and alleviate many personal concerns. Reducing work-hours to generate employment has, from the European experience, shown not only to have failed to enlarge the pool of employed workers, but also to have resulted in a number of negative side effects, i.e., loss of output, inflation and imbalance of trade. Moreover, instituting working time reductions during periods of persistently high unemployment may become permanent, adversely affecting individual preferences for more income than more leisure (Owen 1989, p. 141). Even though some share of unemployment is due to the business cycle, a significant number of individuals are chronically unemployed. In Europe and the United States reported statistics on unemployment mask the true story. As it was mentioned earlier, jobless rates do not distinguish between those who are involuntarily employed part-time; year-round, full-time workers; discouraged workers; and those who are not part of the official labor force. All individuals who are able and willing to work cannot be employed by spreading the work of those who are employed. This would be, to use a musical analogy, as if a string quartet had five players. There is, instead, a level of structural unemployment causing enormous social and economic costs; to deal with this unemployment adequately requires not rationing work, but a radical change in the institutional arrangements that presently guide economic and political thinking. These changes include activist governments fostering increases in the demand for labor that lead to further employment emanating from increases in effective demand. To these options, we turn next.

Employment subsidies

In a series of articles culminating in a recent highly acclaimed book, Edmund Phelps of Columbia University has proposed subsidizing the employment of low-wage, lower-skilled workers (1994a, 1994b, 1997). Aside from ethical considerations that a wage be fair, an employment subsidy may become, he contends, the impetus of higher levels of employment from the ranks of unemployed and those not presently in the labor force. Wage subsidies were first proposed by Pigou (1933), Kaldor (1936), Jackman and Layard (1986), and Snower (1993) all in Britain, and in the United States by Hammermesh (1978), Haveman and Palmer (1982), Phelps, and many others.

Employment subsidy schemes that require the cost to firms of employing additional workers be partially offset by public purse payments to the employer gained considerable currency as a means to counter economic contraction and high unemployment (i.e., in the 1930s and 1970s), and for lifting or "rewarding" low-wage workers. However, as Phelps points out, when the Keynesian notion of insufficient effective demand caused by monetary and fiscal policies won the argument of how to deal with unemployment, "wage subsidies fell out of fashion, if not into disrepute. Then, when economists concluded that the usual monetary maladjustment works itself out --that unemployment tends toward its current 'natural' level through wage adjustments or the traditional behavior of the central bank-- the way was clear for a return of the idea of employment subsidies" (Phelps 1997, p. 144). The case has also been made that wage subsidies to employers can impact not only those directly effected, but others who are dependent on them (children) as well as the wider community, i.e., challenging disadvantaged workers or those who are involuntarily not in the labor force to be susceptible to opportunities of crime and other illegal activity (Phelps 1994b, p. 57). Furthermore, low wages in general, are a disincentive for the unskilled to seek employment, and to rely instead on benefits and entitlements afforded by the safety net (ibid).

To be sure, subsidies for rewarding work exist and the evidence for being successful is mixed. The Earned Income Tax Credit (EITC), for example, has been criticized for many reasons: (i) being vulnerable to abuse since it does not take into account nonwage income, (ii) it is directed mainly to heads of households and neglects many poor, single workers, (iii) it intervenes in labor markets by depressing wages, and (iv) provides the least incentive to work to those whose job commitment is the weakest, since the potential benefits for them are very low (Phelps 1997). These criticisms notwithstanding, many commentators have urged that it be expanded to boost poorly paid work (Bluestone and Ghilarducci

1996). Another form of subsidy is the "negative income tax," which benefits every individual regardless of employment. However, such a tax works more to alleviate the problem of redistribution than to maximize employment (Tobin 1966, 1967). There is, by and large, a general agreement that neither the EITC nor the negative income tax provide inducements for employment growth or incentives to hold onto a job to the same extent that a wage subsidy would pull from the unemployed, non-employed or welfare rolls. Phelps estimates that the initial cost of his proposed plan of a "graduating" employment subsidy -the subsidy decreases as the wage increases-- would be about \$98 billion, if it were to be in place in 1990 as indicated in Table 1 (1997, p. 175). In 1997, the estimate goes up to \$125 billion reflecting inflationary increases in money wages and the resulting increased employment over the 1990-1997 period (Phelps, p. 116). Phelps is not concerned with the cost of his proposal, however, since a small increase in the payroll tax, which he calculates at 2.5 percent, can finance it.

Cost of the Model Wage Subsidy Plan

Hourly wage	Hourly subsidy	Annual wage	Annual subsidy	Number of employees		Subsidy outlay (\$ billions)
				(%)	(millions)	
\$1 or less	\$0.00	--	--	0.1%	.061	--
2 to 1.01	0.00	--	--	0.2	.122	--
3 to 2.01	0.00	--	--	0.8	.488	--
4 to 3.01	3.00	\$7,000	\$6,000	5.9	3.599	\$21.594
5 to 4.01	2.29	9,000	4,580	10.4	6.344	29.056
6 to 5.01	1.65	11,000	3,300	9.4	5.734	18.922
7 to 6.01	1.12	13,000	2,240	9.6	5.856	13.117
8 to 7.01	0.71	15,000	1,420	9.1	5.551	7.882
9 to 8.01	0.43	17,000	860	7.0	4.270	3.672
10 to 9.01	0.24	19,000	480	8.1	4.941	2.372
11 to 10.01	0.13	21,000	260	4.2	2.562	0.666
12 to 11.01	0.06	23,000	120	5.3	3.233	0.388
13 to 12.01	0.00	25,000	0	4.6	2.806	0
14 to 13.01	0.00	27,000	0	3.4	2.074	0

15 to 14.01	0.00	29,000	0	3.7	2.257	0
20 to 15.01	0.00	35,000	0	10.4	6.344	0
25 to 20.01	0.00	45,000	0	4.3	2.623	0
More than 25	0.00	--	0	3.5	2.135	0
Total				100.0	61.000	\$97.669

From *Rewarding Work*, by Edmund S. Phelps. Copyright © 1997 by the President and Fellows of Harvard College. Reprinted by permission of Harvard University Press.

Sources: Percentage distribution from the Current Population Survey, March 1990. Number of employees from U.S. Census 1990. Table covers full-time employees in the private sector (full-time employees taken to work 2,000 hours per year).

Phelps' plan has had a fair number of criticisms that have focused on the general issue of the effectiveness of subsidies, since it is possible that employers will seek to substitute subsidized workers for those currently employed. If the plan is successful in promoting higher levels of private sector employment, as assumed, it also is likely to result in upward pressure on money wages, which would lead to inflation and add to rigidities in the economic system that hinder expansion. Furthermore, even though Phelps refers to his scheme as a "market-based approach," the plan entails significant interference with employer decisions, thereby distorting the market mechanism. There is a question whether a firm's behavior will become directed toward obtaining the subsidy, rather than to the market to obtain profits. Phelps argues these criticisms away by distinguishing "private" from "social" productivity and, thus, the "free-market" from "social" prices of labor, which give rise to the distinction of private versus social costs, and then, to higher prices. This is no different, he contends, than Marshall's and Pigou's recognition that even in competitive markets there are many instances of a "free-market" price diverging from the "right" price. He insists his plan is based "on the view that judicious subsidies are acceptable..... as long as the system of free enterprise is kept firmly in place" and "if low-wage workers become better rewarded, a more adventurous and less bridled capitalism might well be justified" (1997, p. 123). In the end, what can be said is that subsidized low-wage labor schemes, despite their high price tag, may not guarantee full-employment.

Government as Employer of Last Resort (ELR)

Hyman P. Minsky (1986) was skeptical of employment policies based on subsidies because he believed such policies were liable to lead to inflation, financial crisis, and serious instability. Instead, Minsky proposed an alternative employment strategy, which he called an "employer of last resort" (ELR) policy, in which government provides a job guarantee. He felt such plan would promote full employment without the inflationary pressures and structural rigidities usually associated with economies operating at full employment. Minsky was not alone in advocating the government's role as the employer of last resort. Others, including Layard, Nickell, and Jackman (1991) suggested that non-targeted public employment may lead to a net gain in total employment even though, in their view, the taxes needed to finance such public employment must be absorbed by labor. And recently, Robert Solow (1998) urged the creation of a public employment program for former welfare recipients. Minsky's proposal has been developed in considerable detail by a group of researchers at the Levy Institute (Wray 1997, Forstater 1997) providing even greater theoretical support for a government guaranteed job assurance.

The first component of the proposal would be relatively simple. The government as employer of last resort would announce the wage at which it will offer employment to anyone who wants to work in the public sector, and then would employ all who want to work at that wage. Normal public sector employment will not be affected by this job guaranteed plan, but will remain a vital and separate component of public employment. Under this program, the government would become in a sense "a

market maker for labor" by establishing a "buffer stock of labor" as it would stand ready to "buy" all unemployed labor at a fixed price (wage), or to "sell" that is, provide it to the private sector at a higher price (wage). As is the case in all buffer stock schemes, the commodity used as a buffer stock is always fully employed. It always has a very stable price, which cannot deviate much from the range established by the government's announced "buy" and "sell" price. This feature of the proposal ensures full employment with stable prices. The buffer stock aspects of this job guaranteed program 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 government spending that would increase private demand sufficient to lower unemployment to the full employment level. The danger was that the Keynesian policies would lead to tight labor markets and that inflation would be generated long before reaching full employment. The program entailing a "public service employment" strategy would operate through increases or decreases to the buffer stock of labor, rather than causing unemployment. (If the buffer stock of labor shrinks in an expansion causing pressures on inflation, government raises taxes or reduces spending to replenish the buffer stock.)

This program can eliminate all involuntary unemployment by providing jobs for every person ready, willing, and able to work. There will still exist many individuals -even those in the labor force- who will be voluntarily unemployed, unwilling to work for the government, unwilling to work for the government's predetermined wage, would not meet the minimum standards for such employment, or would rather look for a better job while unemployed. But any person willing and able to work -able defined very broadly as virtually all Americans who can contribute to the economy and society, irrespective of the size of the contribution- will have the opportunity to do so.

The implication of the program is that much social spending that is currently targeted to the unemployed can be discontinued or eliminated altogether. Unemployment compensation is one example that provides some income for some of the unemployed. Guaranteed "public service employment" will render unemployment compensation unnecessary since coverage would be conceivably universal; no one would be paid for not working, and pay would be equalized. Moreover, some other forms of social spending, i.e., Temporary Assistance to Needy Families (TANF), Aid to Families with Dependent Children, and Food Stamps, could be substantially reduced. A public service guarantee program cannot substitute all social support since many individuals currently receiving such assistance are not and probably could not be in the labor force. Precisely, who would be forced out of these current programs and into the "public service employment" plan outlined here, cannot be easily determined. However, unlike welfare-to-work schemes, this employment program is voluntary, ensures a job is available, and has no lifetime limit. Taking the current number of unemployed, as well as the cost of various programs that would be either reduced or eliminated and projecting the cost of the job guaranteed policy and potential savings, it has been calculated that the net cost to the government could be as high as \$50 billion (Wray 1997). Obviously, the budgetary effects of such a policy are quite small relative to the size of the federal budget, to the size of the U.S. GDP machine, and to the size of this year's actual federal budget surplus (and those projected well into the future). Moreover, this estimate does not include any indirect benefits likely to redound from this policy, such as those resulting from decreases in the social costs of unemployment, i.e., decreased criminal activity, physical and mental health problems, and the benefits of some public sector projects, such as those relating to environmental protection, and improvements in the physical condition of the cities and the country as a whole.

Many questions can be raised in connection with a "public service employment" program. Is full employment going to increase aggregate demand to the level that accelerating demand-pull inflation would follow? Can aggregate demand increase to the level at which the additional federal budget spending will not generate inflation? The answers to these questions seem clear. If in the absence of a guaranteed public service employment policy, public and private sector spending provides a level of employment that leaves more than 6 million workers unemployed and more than 3 million underemployed, this must be evidence that aggregate demand is too low. For if it were higher, the population would be spending more and creating more jobs for the unemployed. Indeed, existence of involuntarily unemployed workers is *de facto* evidence that aggregate demand is below the level required for full employment. Thus, additional government spending that increases employment is indicative of aggregate demand being below the full

employment level. The "public service employment program" can be designed to ensure that additional federal spending will rise only to the point at which all involuntary employment is eliminated. Once there are no workers willing to accept a guaranteed job, spending will not be increased further; the program therefore ensures that spending does not become "excessive," that is, it will not cause aggregate demand to increase beyond the full employment level. Fine-tuning aggregate demand is still possible with the adoption of this policy, since increases in demand will cause the guaranteed job pool to shrink, while decreases will result in its expansion. This policy limits spending to the level that will guarantee true full employment, thereby alleviating concern about demand-pull inflation.

What about cost-push inflation resulting from the pressure on wages and in turn costs and prices? The wage paid by the government for the public service employment program is exogenously set, stable, and sets a benchmark price for labor. Although some jobs might still pay a wage below the program's wage -for example, for work that is more pleasurable- once the program is put in place, most of the low-wage jobs will experience a one-time increase in wages or may disappear altogether. Employers will be forced to cover these higher costs through a combination of higher product prices, greater labor productivity, and lower realized profits. Some product prices, therefore, would experience a one-time increase, but this phenomenon is not inflation, nor can it be accelerating inflation as these terms are normally defined by economists.

Recent literature places a high rate to and in turn, a high cost for depreciation on idle human capital: Labor productivity falls quickly when labor is unemployed, and beyond some point, labor probably becomes unemployable because of loss of "work habit". With a "public service employment" policy those who are not employed in the private sector continue to work, and, in turn, skills will not depreciate so quickly. Indeed, social policy could be geared toward enhancing the human capital of the guaranteed job pool which, in turn, would reduce the productivity-adjusted cost of hiring out of this pool relative to unemployed workers, and thereby diminish inflationary pressures.

It is, therefore, not clear that this type of full employment policy will be inflationary in the sense of generating continuous pressure on wages and prices. Wages might experience a one-time increase because of the, say \$12,500 plus mark up to annual labor costs (calculated at \$6.00 per work/hour for 2080 hours per year) required to hire unemployed workers. And 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 the public service employment program will reduce the erosion of human capital, and possibly will develop or maintain the human capital of workers who are temporarily unneeded in the private sector. When demand for private output rises sufficiently for these workers to be hired in the private sector, the somewhat higher cost of workers in the program relative to the cost of unemployed workers in the absence of the program is somewhat offset by higher productivity, thereby reducing any pressure on prices. Moreover, because unemployment compensation may no longer be needed, there would be no need for experience-rated unemployment insurance taxes on firms and workers. That is, those firms that typically have volatile (seasonal or cyclical) demand for labor would experience a reduction in overall labor costs, which, again, would tend to offset some of the higher wage costs. By and large, even the one-time upward adjustment in wages and prices might be quite small.

It is difficult to see why true full employment under a public service job opportunity program could be more inflationary than the current system, which pays people for not working, allows their human capital to depreciate, and results in high economic and social costs associated with unemployment. In addition, income maintenance programs increase aggregate demand without increasing aggregate supply, while this employment program increases both aggregate supply and aggregate demand, which puts less pressure on prices.

Even if successful at substantially increasing employment, programs calling either for a wage subsidy or reductions in the workweek could result in the inflation and sluggish growth associated with tight labor markets and structural rigidities. In contrast, a public service employment solution could provide a full employment policy that retains price stability and labor market flexibility. Such an approach also will be

relatively inexpensive and is likely to pay for itself. Public sector employment will preserve and could even enhance the productivity of the "reserve pool" of guaranteed job holders, and potentially could provide valuable public services including many that reduce social and environmental costs. As Minsky put it, "only an infinitely elastic demand for labor can guarantee full employment without setting off a wage-price spiral, and only government can create an infinitely elastic demand for labor" (Minsky 1986). At the same time, as long as those holding a guaranteed job are available when private sector demand increases, then such a program would not result in inflationary pressures or structural rigidities.

There will surely be many objections to a program of public service guaranteed jobs. These will undoubtedly include the following: Will this public service job opportunity program be another make-work New Deal WPA? If such a program is instituted, can it be efficiently administered? States are already implementing welfare-to-work programs, why is this program needed? Won't participation in such a program lead to stigmatization? And finally, why worry now, when unemployment is at the lowest level it has been for a generation.

Proponents of the public service guaranteed jobs program would easily respond to these. First, they would cite the numerous WPA achievements that enhanced the country's physical infrastructure, the artistic and educational accomplishments, and most importantly, the opportunity the WPA gave to millions of people to productively contribute to the American economy and society (Minsky 1986). Second, they would enumerate the plethora of needed but unfilled jobs, i.e., teachers assistants, library and day care assistants, companions to senior citizens, the bedridden and mentally and physically impaired, neighborhood that highway clean-up, environmental safety monitors, and many more that this program can help fill. Third, given the abuses of some public programs, the concern of efficiently administering a public service guaranteed jobs program is legitimate, but there are some model programs, i.e., VISTA, the Peace Corps, or Americorps that could be modified to administer it with minimum costs. Fourth, state after state, with only a few exceptions, have indicated that they will not offer permanent work to prior welfare recipients leaving them to fend for themselves. Fifth, given the experience and the enthusiasm of participants in the Peace Corps, VISTA and Americorps, a public service work assignment may be a good entry in the resume. Finally, as I argued earlier, a closer look at the official unemployment measurements does not show a "worker heaven."

What Is to Be Done?

The costs of unemployment are significant and many of them can be quantified, especially those associated with the loss of output that unemployed workers could have produced. Furthermore, those who are working (and their employers) are burdened with financing unemployment insurance and other maintenance support that the unemployed receive. Alas, the "damages" of unemployment do not stop with these. There are many other negative effects (Sen 1997) that inflict the unemployed, including loss of freedom and social exclusion, poor health and mortality, discouragement and loss of motivation for future work, weakening of family structure, racial and gender intolerance, cynicism and ultimate loss of social values and self-reliance, and psychological suffering, mental agony and even suicide. Unemployment also breeds resistance to organizational flexibility and promotes technical conservatism from those currently employed who fear downsizing and joblessness.

The realized costs and negative effects of unemployment are undoubtedly much higher in Europe than in America, although it is difficult to discern if this is so from the official statistics. Yet, the absence in the Maastricht Treaty (which provides the process of implementing a single European currency and includes specific resolutions to reduce inflation and budget deficits) of any requirement for an all-round unemployment rate is disturbing. Even in the United States an articulated commitment of employment targets, enumerated in the Employment Act of 1946 and the Humphrey-Hawkins Act of 1978, has been affirmed by each successive political establishment. But the real issue is not to discover each continent's or country's skeletons in the closet rather, it is whether policymakers are willing to learn the lessons of successful (and failed) policies of the past, amend them to reflect current economic conditions, and to finally marshal the needed resources to implement them.

William Vickrey, in his AEA presidential address in 1993 ended with these sentences: "There is no reason

inherent in the real resources available to us why we cannot move rapidly within the next two or three years to a state of genuinely full employment and then continue indefinitely at that level. We should then enjoy a major reduction in the ills of poverty, homelessness, sickness and crime that this would entail. We might also see less resistance to reductions of military expenditure, to liberalization of trade and migration policy, and to conservation and environmental protection programs." Should this be "Today's Task" for economists? I think so, I hope so.

References

Bean, C. (1994), "European Unemployment: A Survey", Journal of Economic Literature, 32 (2).

Beveridge, William (1945), Full Employment in a Free Society (New York: W. W. Norton).

Blaug, Mark (1993), "Public Enemy No. 1: Unemployment Not Inflation" Economic Notes by Monte dei Paschi di Siena 22 (3): 387-401.

Bluestone, Barry, and Teresa Ghilarducci (1996), Wage Insurance for the Working Poor", Public Policy Brief no. 28, Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.

Bluestone, Barry, and Stephen Rose (1998), The Unmeasured Labor Force: The Growth in Work Hours" Public Policy Brief no. 39, Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.

Brunello, Giorgio (1989), "The Employment Effects of Shorter Working Hours: An Application to Japanese Data", Economica 56 (November): 473-86.

Bureau of Labor Statistics (1998), "The Employment Situation: October 1998", May (Washington, D.C.: United States Government Printing Office).

Calmfors, Lars (1985), "Work Sharing, Employment and Wages", European Economic Review 27 (3): 293-309.

CEC (Commission of the European Communities) (1978), Work Sharing: Objectives and Effects, Commission staff paper, Annex to SEC, 78 (740).

DeRongé, Annik, and Michel Molitor (1991), "The Reduction of Working Hours in Belgium: Stakes and Confrontations", in Hinrichs, Roche and Sirianni, eds. (1991), Working Time in Transition: The Political Economy of Working Hours in Industrial Nations (Philadelphia, PA: Temple University Press), pp.149-169.

Deutschmann, Christoph (1991), "The Worker-Bee Syndrome in Japan: An Analysis of Working-Time Practices", in Hinrichs, Roche and Sirianni, eds., op. cit. 189-202.

Dixon, Peter B. (1987), "The Effects on the Australian Economy of Shorter Standard Working Hours in Construction and Related Industries", in Australian Bulletin of Labour, 13 (4) (September): 264-289.

Drèze, J., and C. Bean, eds. (1990), Europe's Unemployment Problem (Cambridge, MA: MIT Press).

Drèze, Jacques H. (1986), Work-Sharing: Why? How? How Not..., Centre for European Policy Studies Papers, 27.

Eatwell, John (1995), "Disguised Unemployment: The G7 Experience", Discussion Paper, United Nations Conference on Trade and Development, No. 106.

Economist (1993), "Sharing the Burden", November 13.

European Industrial Relations Review (1993), "Working Time Directive: Common Position", (235) (August): 15-18.

Forstater, Mathew (1997), "Selective Use of Discretionary Public Employment and Economic Flexibility" Jerome Levy Economics Institute, Working Paper No. 218.

Garfinkel, Irwin (1973), "A Skeptical Note on "The Optimality" of Wage Subsidy Programs", The American Economic Review 63: 2 (June): 447-453.

Gow, David (1993), "More Time Off Could Save German Jobs", The Guardian, London, November 4.

Hammermesh, Daniel S. (1978), "Subsidies for Jobs in the Private Sector", in J. Palmer, (ed) Creating Jobs (Washington, D.C.: Brookings Institution).

Haveman Robert H., and John L. Palmer, eds. (1982), Jobs for Disadvantaged Workers, (Washington, D.C.: Brookings Institution).

Hernandez, Raymond (1998), "Most Dropped from Welfare Don't Get Jobs", New York Times March, 23, B6(1).

Hinrichs, Karl (1991), "Working-Time Development in West Germany: Departure to a New Stage", in Hinrichs, Roche and Sirianni, eds., op. cit. 27-59.

Hinrichs, Karl, William Roche, and Carmen Sirianni, eds. (1991), Working Time in Transition: The Political Economy of Working Hours in Industrial Nations (Philadelphia, Penn.: Temple University Press).

International Labour Review (1993), "France: Company Work-Sharing Agreements", 132 (2): 293-298.

Jackman, R., and Richard Layard (1986), "A Wage-Tax, Worker-Subsidy Policy for Reducing the "Natural Rate of Unemployment"", in Wilfred Beckermann, ed., Wage Rigidity (Baltimore: Johns Hopkins University Press).

Jallade, Jean-Pierre (1991), "Working-Time Policies in France", in Hinrichs, Roche and Sirianni, eds., op. cit. 61-85.

Kaldor, N. (1936), "Wage Subsidies as a Remedy for Unemployment", Journal of Political Economy 44 (December).

Layard, Richard, Stephen Nickell, and Richard Jackman (1991), Unemployment: Macroeconomic Performance and the Labour Market (New York: Oxford University Press).

Levitan, Sar A., and Richard S. Belous (1977), Shorter Hours, Shorter Weeks: Spreading the Work to Reduce Unemployment (Baltimore: Johns Hopkins University Press).

McGaughey, William Jr. (1981), A Shorter Workweek in the 1980s (White Bear Lake, Minn.: Thistlerose Publications).

Minsky, Hyman P. (1986), Stabilizing an Unstable Economy (New Haven: Yale University Press).

Morand, Martin J., and Ramelle Macoy, eds. (1984), Short-Time Compensation: A Formula for Work Sharing (New York: Pergamon Press).

Norman, Peter (1998), "Rexrodt Hails Change in Jobless Trend", Financial Times, March 12.

Organisation for Economic Co-operation and Development (1995), The OECD Jobs Study: Implementing the Strategy (Paris: OECD) 23.

Owen, John D. (1989), Reduced Working Hours: Cure for Unemployment or Economic Burden? (Baltimore: The Johns Hopkins University Press).

Papadimitriou, D. B. (1991), "Western Approaches for Restructuring the Central and Eastern European Economies" Working Papers of the World Economy Research Institute, Warsaw School of Economics, 49 (October).

Phelps, Edmund S. (1994), "Economic Justice to the Working Poor Through Wage Subsidy", in Dimitri B. Papadimitriou, ed., Aspects of Distribution of Wealth and Income (New York: St. Martin's Press), pp. 151-164.

----- (1994), "Raising the Employment and Pay of the Working Poor: Low-Wage Employment Subsidies Versus the Welfare State", AEA Papers and Proceedings 84: 2 (May): 54-58.

----- (1997), Rewarding Work (Cambridge, MA: Harvard University Press).

Pigou, A.C (1933), The Theory of Unemployment (London: Macmillan Press).

Robinson, J. V. (1937), "Disguised Unemployment", Essays in the Theory of Employment (London: Macmillan).

Roche, William K., Brian Fynes, and Terri Morrissey (1996), "Working Time and Employment: A Review of International Evidence", International Labour Review 135 (2): 136-139.

Schor, Juliet B. (1991), The Overworked American: The Unexpected Decline of Leisure (New York: Basic Books).

Sen, Amartya (1997), "Inequality, unemployment and contemporary Europe", International Labour Review, 136: 2 (Summer).

Snowder, Dennis J. (1993), "Getting the Benefit out of a Job", Financial Times, February 23.

Solow, Robert (1998), "Inequality, Unemployment and Contemporary Europe," International Labour Review 136: 2 (Summer).

Thurow, Lester (1996), The Future of Capitalism (New York: W. Morrow).

Tobin, James (1966), "The Case for an Income Guarantee", Public Interest 4 (Summer).

Tobin, James et al. (1967), "Is Negative Income Tax Practical?", Yale Law Journal 77 (November).

Wray, L. Randall (1997), "Government as Employer of Last Resort: Full Employment Without Inflation", Jerome Levy Economics Institute, Working Paper, No. 213.