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## **Promoting Equality Through an Employment of Last Resort Policy**

by

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## ABSTRACT

To put an economy on an equitable growth path, economic development must be based on social efficiency, equity, and job creation. It has been shown that unemployment has far-reaching effects, all leading to an inequitable distribution of well-being. But many economists assume that unemployment tends toward a natural rate below which it cannot go without creating inflation. The paper considers a particular employment strategy: a government job creation program, such as an employment guarantee or employer-of-lastresort scheme, that would satisfy the noninflationary criteria. The paper analyzes the international experience of government job creation programs, with particular emphasis on the cases of Argentina and India. We conclude by considering the application of an employer-of-last-resort policy to the developing world and as a vehicle to meeting the Millennium Development Goals.

**Keywords:** Employment Policy; Employment of Last Resort; Promotion Equality; Government Job Creation; Millennium Development Goals; Employment

JEL Classifications: D63; E24; E62; I38; J45

"There is plenty of evidence that unemployment has many far-reaching effects other than loss of income, including psychological harm, loss of work motivation, skill and self-confidence, increase in ailments and morbidity (and even mortality rates), disruption of family relations and social life, hardening of social exclusion, and accentuation of racial tensions and gender asymmetries."

Amartya Sen (1999)

#### **INTRODUCTION**

To put an economy on an equitable growth path, economic development must be underpinned by social efficiency, equity, and job creation. The challenge is drawing together the right mix of social, employment, and economic policy to achieve this end. The employment policy, in particular, should not lead to inflation, interfere with the microdecisions of individual firms, or replace existing jobs. Further, it must not rely upon the fine-tuning of aggregate demand to achieve outcomes. For employment policy, there are several options that appear to meet these criteria: work-time reduction, employment subsidies, and government job creation programs (such as employment guarantee schemes or employer of last resort approaches). The former two have been used extensively and have generated mixed outcomes. Experiments with work-time reduction strategies in Germany, the Netherlands, Belgium, France, Australia, and Japan have failed to yield employment increase, while employment-subsidy approaches interfere with employer decisions, thereby distorting the market mechanism (Papadimitriou 1998). The employment-subsidy strategy is one of the oldest policies proposed, going as far back as in Pigou (1933), Kaldor (1936), Hammermesh (1978), Haveman and Palmer (1982), and Phelps (1997). This strategy entails a partial offset of the cost to firms hiring additional workers from the public purse, but it is unlikely to achieve higher levels of employment, and instead the subsidized job recipient would substitute for the worker currently employed. There are also other forms of wage subsidies that have been used, such as the Earned Income Tax Credit (EITC) in the United States and the negative income tax (Tobin 1966; Tobin, Pechman, and Mieszkowski 1967) in other countries. The EITC has garnered support (Bluestone and Ghilarducci 1996) for boosting employment and the income of low-paid workers, and criticism (Garfinkel 1973) for not providing inducements for employment growth or incentives to hold onto a job. Any

form of wage subsidy, however, would have limited application in some developing countries where the private sector is not sufficiently developed. Similarly, programs that focus on training and increasing employability are also unlikely to stimulate higher levels of labor absorption.

It should be noted that official statistics on levels and rates of unemployment should not be accepted without further inquiry. Ajit Singh<sup>1</sup> has suggested that one needs to define unemployment before discussing it, since the official measures do not reflect what is reality. On the one hand, the extreme definition of zero unemployment comes from the writings of the British economist William Beveridge (1945) as the state of the economy "having always more vacant jobs than the number of unemployed." On the other hand, the official unemployment rate in the United States, for example, does not take into account workers employed in the informal sector or those individuals who are out of the labor force—having been discouraged getting into it or having exhausted their unemployment benefits have stopped looking for a job—but desperately wanting a job. Further, official measures of unemployment do not distinguish in the calculations workers in part-time jobs (for economic reasons) from those in full-time positions and double count those who hold multiple part-time jobs. Thus, the official U.S. unemployment rate of 6.1 percent for August 2008, when adjusted to include the other categories of unemployed persons, turns out to be 10.7 percent (BLS 2008).

In the next section we present the government direct job creation approach first proposed by Hyman Minsky (1965) from his concerns regarding the impending failure of the War on Poverty in the United States in the 1960s. We then discuss the relationship of such policy to fiscal and monetary policy space. In the subsequent section, we review the empirical evidence for these types of programs, paying particular attention to two of the most successful in Argentina and India. In the final section, we briefly discuss the insights that such a policy can provide to developing countries and the contribution of such policy in fulfilling the objectives of the Millennium Development Goals.

<sup>&</sup>lt;sup>1</sup> Private communication, July 2007.

# MINSKY'S EMPLOYER OF LAST RESORT POLICY: THEORY AND PRACTICE

Hyman Minsky was not the first economist to suggest that government play a role in ensuring full employment. In a very detailed paper, Fadhel Kaboub (2007) has suggested that the idea of government acting as employer of last resort dates as far back as the seventeenth century in the period after the Industrial Revolution when it was recognized that capitalist economies were ill-equipped to facilitate a state of full employment. Thus, we find in the writings of Sir William Petty in 1662 a suggestion that there will be a need for publicly employing the unemployed for building infrastructure, with the added benefits of keeping their "minds to discipline and their bodies to patience of more profitable labours, when need shall require it" (Petty 1899 [1662]).

Concerned with the fiscal policies of the Kennedy and Johnson administrations in the 1960s, Minsky wrote "the liberals" War on Poverty was born out of neoclassical theory in which it is the poor-not the economy-that is to blame for poverty. The War on Poverty tried to "change the poor, not the economy" (Minsky 1971: 20). In Minsky's view what was missing from the poverty alleviation programs was the government's commitment to full employment and, accordingly, he was proposing an alternative that was based on "a targeted jobs program, paying decent wages that will successfully reduce poverty among the nonelderly in a politically digestible manner" (Minsky 1971: 20). This led him to advocate an employer of last resort policy in late 1960s and 1970s; he included a more sharpened version in his book Stabilizing an Unstable Economy (1986). Achieving full employment, he insisted, should not be based on subsidizing demand. The usual strategy entails financing conditions, fiscal inducements to invest, government contracts, transfer payments, and taxes that lead to chronic inflation and periodic investment booms, culminating in financial crises and instability. A better approach, he suggested, would be to develop a strategy for full employment that does not lead to instability, inflation, and unemployment. His proposal, further developed by Levy Economics Institute scholars (Forstater 1999; Papadimitriou 1998; Wray 1997), as well as William Mitchell (1998), envisaged the government becoming a "market maker for labor" by establishing a "buffer stock of labor." In effect, the government "buys" all

unemployed labor at a fixed wage or "sells" it (provides it to the private sector) at a higher wage. The commodity (labor) used as a buffer stock always has a stable price. Thus, this approach to employment policy ensures full employment with price stability.

In cases where private sector demand is insufficient to provide full employment, unemployment emerges and persists. It is only the government that can divorce profitability from the hiring of workers and can create an infinitely elastic demand for labor (Minsky 1986: 308). This requires government to take responsibility for providing employment to all those willing and able to work at or marginally below the prevailing informal sector wage. It is important to underscore that an employer of last resort would not and could not replace or eliminate other support programs directed to the disabled, the elderly, orphaned children, etc. Lessons from the New Deal programs during the Great Depression proved that government could successfully fulfill the role of employer of last resort by offering decent jobs that engaged people in socially and economically useful activities that did not compete with the private sector. President Franklin Roosevelt's government programs were many; they included The Public Works Administration, The Civil Conservation Corps, The National Youth Administration, Rural Electrification Administration, and Federal Emergency Relief Act. The economic conditions of those times (1929–33)—with a cumulative GDP decline of more than 45 percent, an unemployment rate of over 30 percent, and a wage income drop of 42.5 percent—were reversed and followed by the "golden period" of American capitalism.

Is such an approach feasible in a contemporary economy? If we consider the true U.S. unemployment picture presently, as discussed earlier, where over 15 million persons are either unemployed or underemployed, the answer would clearly be in the affirmative. Would it be affordable and would it be consistent with a fiscally responsible government? Simulations for the United States, Australia, and the United Kingdom (which exclude income multiplier effects) reveal that such a program would cost between 1 and 3.5 percent of GDP, which would be affordable for most governments. When the multiplier effects of such a program are considered (resulting from the rising incomes of jobguarantee workers and increased demand), the potential benefits extend far beyond the program budget and wage bill. Crude calculations for the United States indicate that an employer of last resort program covering seven million persons would provide an

additional increase of close to 2 percent of GDP, at a program cost of about 1 percent of GDP, as shown in table 1. Beyond the actual cost and multiplier effects of such an intervention, there is a need for consideration of the effects that such a program would have on monetary and fiscal policy, and whether such a program is truly sustainable.

In regard to fiscal policy, government spending creates private sector assets in the banking system; taxation creates private sector debts to the government, which must be financed with those assets. If taxes exceed government spending, the private sector is in net deficit, that is, insolvent. If the private sector holds assets for other convenience purposes, financial stability requires a government deficit over time, equal to the private sector's demand for money balances (saving). Thus, private sector debt or saving is intrinsically related to the government surplus or deficit.

In regard to monetary policy, government spending increases commercial bank reserves. Excess commercial bank reserves drive overnight interbank interest rates to zero. Therefore, to keep interest rates at a desired rate, the government borrows from the reserves of commercial banks. As borrower of last resort it can effectively fix the overnight interbank interest rate (the central bank sets the interbank rate target). The experience of Japan, which set its interest rate at close to zero throughout the 1990–2007 by not paying interest on reserves and net-issuing fewer public bonds than would be required to offset operating factors at the Bank of Japan, clearly illustrates this point.

Interest rates are thus not constrained by the willingness of the private sector to buy government debt or by the size of the government deficit. A government with a fiat currency is not required to borrow or issue debts in order to deficit spend. It follows that the government can always set the overnight interbank interest rate, independent of the size of the deficit or high debt to GDP ratios, without the onset of interest rate increases, currency depreciation, inflation, or destabilization. Therefore, it is possible to finance an employment guarantee program in the same manner that all other government expenditure is financed. Governments spend by crediting bank accounts and tax by debiting them. Excess reserves are drained as part of the interbank interest rate targeting procedure. This perspective emanates from the principle of "functional finance"

developed by Abba Lerner in 1943<sup>2</sup> and is in contrast to the mainstream view of "sound finance."

Traditional/orthodox approaches to fiscal and monetary policy that seek to discipline by minimizing budget deficits and maintaining high real interest rates ultimately undermine domestic mobilization. Given the social and economic consequences of unemployment outlined by Amartya Sen (1999), policy that neglects to let the economy grow equitably is fiscally and socially irresponsible. A responsible fiscal position would ensure that the economy delivers full employment with price stability. If demand in the private sector is insufficient to provide full employment, governments should use domestic policy space to mobilize labor resources to engage communities in socially and economically meaningful activities. A program that engages labor in productive employment has the further benefit of increasing flexibility in the labor market by creating and maintaining a work-ready supply of labor that is capable of meeting the demands of employers in the private sector.

#### DIRECT JOB CREATION: THE INTERNATIONAL EXPERIENCE

Direct job creation programs are not limited to those implemented in the United States in response to the Great Depression; the international experience of such programs is extensive. As table 2 shows, these sort of programs can be classified as addressing specific economic motivations. The program in Sweden (1938–70) was the "right to work"; the Maharashtra State Employment Guarantee program in India was the "right to food," while their national program (NREGA) enacted in 2005 is an entitlement or a "right to employment" program. Other prominent examples of emergency public works programs were implemented in Indonesia and South Korea responding to the East Asian financial crisis, and Argentina's Heads of Households (*Jefes*) Plan in response to that country's crisis in 2001. Similarly, the social funds programs were set up to ameliorate the effects of structural adjustment as those in Bolivia (1986), Chile (1975–1987), Peru

<sup>&</sup>lt;sup>2</sup> "The central idea is that government fiscal policy, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, shall all be undertaken with an eye only to the *results* of these actions on the economy and not to any established traditional doctrine about what is sound or unsound." (Lerner [1943], emphasis in original. Quoted in Kaboub [2006: 7]).

(1991), and the Expanded Public Works Programme in South Africa in 2004. Another motivation for such strategy was the ILO's extensive employment-based intensive public works programs throughout Africa.

The programs in Argentina and India are of particular significance in that they offer the opportunity for lessons to be drawn from their implementation, successes, and needs for improvement. To these, we turn next.

#### Argentina's Plan Jefes y Jefas de Hogar

December 2001 saw Argentina's economic and social crisis peak. The social unrest demanded an intervention that would reduce poverty and unemployment, while boosting domestic demand to facilitate recovery of the economy from three years of recession. Argentina's experience with labor market programs is extensive; previously the government had experimented with training programs, wage subsidies, and various other targeted job creation programs, as well as quota job creation programs such as the *Trabajar* program (1995–2002). While *Trabajar* consistently received positive reviews, the scale of the intervention was not capable of providing the necessary safety net for the large-scale social dislocation, poverty, and unemployment precipitated from the 2001–2002 economic crisis.

To relieve the consequences of the economic crisis, the government introduced the *Plan Jefes y Jefas de Hogar Desocupados (Jefes)* in April 2002. The program offered 150 pesos per month for four hours of work daily to a head of household with children younger than 18 years of age or households caring for people with disabilities. The *Jefes* program was unique in that it did not set an artificial cap on the number of beneficiaries from the target group who were able to access the program (Kostzer 2007).

Participants were to work in community services, microenterprises (typically agricultural), and small construction/maintenance activities or were to engage in training programs, particularly those concerned with completion of secondary schooling. The *Jefes* program was augmented with the *Programa de Emergencia Laboural* (PEL), which provided the same wage-income benefit and work opportunity for those in need of social assistance, but were not eligible for *Jefes*. At the program's peak, nearly two million households (1.6 million in *Jefes* and 300,000 in PEL) were engaged in socially

meaningful work opportunities. In total, the two programs represented 5 percent of the population (37 million) and 13 percent of the labor force (Kostzer 2007).

Thus far the assessment of the *Jefes* program reveals many lessons about employment guarantee/job creation programs. First, the target population was wellfocused on poor households with children. Second, over 55 percent of households had at least one basic need unmet, such as inadequate sanitation or housing. Third, over 75 percent of program beneficiaries had not completed secondary education and over 65 percent were in the bottom quintile for national income. Fourth, the program increased income for poor households and was effective in addressing indigence (food/shelter), but did not pull households above the poverty line (Tcherneva and Wray 2005a) and had no appreciable impact on the country's Gini coefficient. Finally, *Jefes* also encouraged a large influx of women into the labor market, with women making up more than 60 percent of program participants.

The limited offer of employment forced households to decide who would participate in the program and often women entered the program while their husbands remained unemployed or sought employment in the informal economy. There were also some implementation and supervision problems, as well as some relatively rare cases of mismanagement, corruption, and favoritism/discrimination. Possible remedies to these problems exist in program expansion to further reduce unemployment and underemployment. Solutions would involve relaxation of program entry requirements so that more than one family member could participate in the program. Further, if household income were increased to 300 pesos a month, the program would become more effective at lifting families out of poverty (Tcherneva and Wray 2005b).

The *Jefes* program effectively empowered communities and allowed them to address deficiencies in local service delivery and infrastructure. The decentralized model of administration required local and municipal governments to assess the most pressing needs and available resources of their communities in order to ensure that *Jefes* projects could provide a valid contribution to local economic recovery.

As the economy began to recover, beneficiaries exited the program for work offered at higher remuneration in the private sector. While this program was not the government's primary strategy for economic recovery, it was very complimentary to the

government's adopted macroeconomic framework. The program fulfilled an essential role during a turbulent period, providing both a social and economic context that contributed to stabilization of the exchange rate, consumer and producer prices, and GDP recovery. Indeed, it is estimated that the cost of the program is about 1 percent of GDP while the multiplier effects of the *Jefes* program, at its peak, could potentially add 8,327 million pesos to GDP annually (or 2.49 percent of GDP).

While the *Jefes* program was a limited employment guarantee scheme implemented as an emergency response to crisis, it provides a relevant example of successes and issues that emerge from the implementation of such an initiative. Domestic consensus, for instance, is a very necessary program element, as the initiative relies heavily on local/municipal government and the commitment of individuals for implementation. The general sentiment of the program's beneficiaries put to rest criticisms on the feasibility of the *Jefes* plan. Ensuring sustainability, however, an employment strategy of this sort must be financed by a sovereign federal government. The social and economic consequences of *Jefes* reveal that even limited employment guarantee programs can have a substantial impact on the quality of life in local communities.

### **India's Employment Guarantee Schemes**

India has a long history of guaranteed employment programs, with the largest of them having started some forty years ago in the state of Maharashtra in response to a devastating drought in 1972. The program was organized toward achieving two objectives: guarantee of employment and improvement of rural infrastructure. It was also based on the principle of the right-to-work for everyone over 18 years in the rural areas of the region. The main characteristics of the program included: productive employment, (i.e., labor-based public works projects); projects aimed at improving productivity of agriculture; fixed wages that were based on the quality and quantity of work (piece-rate), but an average workday of good work would earn the day's minimum wage together with some welfare support programs; and lastly, financing of the program was through new taxes and surcharges. The program was supervised by both the Ministry of Planning at the state level and at the district level by the district collector (Hirway and Terhal 1994).

Productive employment included labor that was primarily devoted to projects such as moisture and water conservation (i.e., irrigation projects, canal construction, percolation, storage tanks, etc.), soil conservation, land development, forestation, roads, and flood prevention and protection (Hirway and Terhal 1994: 109). The annual program cost has hovered around 1 percent of GDP and, until 2001–02, had cumulatively generated 3.7 billion days of work. During 2001–02 alone, the program generated 160 million days of work at a cost of Rs 9,417 million, representing less than 1 percent of GDP.

The Maharashtra experience has had a number of variegated effects on the projects constructed, conditions of poverty, and the organization of labor. As was the experience with other employment programs in post-colonial India, the program had a number of weaknesses including low coverage, a large fraction of participants were not drawn from the neediest groups, a large bureaucracy, little community involvement, corruption, and limited participation of women. Assessments of the program's overall effectiveness were mixed (Acharya 1990; Godbole 1990; Hirway and Terhal 1994: 111). It has, however, been shown that the program was financially sustainable, has generated supplementary employment and income for many workers, and the assets constructed under the aegis of the program have contributed to the growth in agriculture, the dairy industry, and horticulture. Finally, in some segments of the state's labor force, the program has resulted in strengthening the organization of workers and contributed to the impetus that brought about the National Rural Employment Guarantee Act (NREGA).

The National Rural Employment Guarantee has two objectives: (i) provide a job to landless labor and marginal farmers in nonagricultural seasons, and (ii) create durable assets to increase land productivity that will reverse decreasing agricultural output (Mehrotra 2008). These objectives will be accomplished by guaranteed employment of least 100 days to poor rural adults, within a five-kilometer radius of their homes, at the statutory minimum wage along with some training and upgrading of skills, as well as offering subsidized children's daycare costs to those who need it. The legislation's first phase, beginning in 2006, covers the 200 poorest rural districts and, within five years, is to cover all rural districts of the entire country (Antonopoulos 2007).

The national program was also designed to remedy many of the weaknesses of previous programs. It introduced a rights-based framework, a legal guarantee to employment that could not be budgeted-out at will, fulfillment of job requests within 15 days, providing incentives for performance and disincentives for nonperformance, and instituting demand-based resource availability and accountability of program results through social audits (Mehrotra 2008: 27). Preliminary evaluations of the program (as reported by the Ministry of Rural Development) indicate that in 2006–07 it generated 905 million person-days of work for the initial 200 districts, while the next year (2007–08) the person-days of work increased to 1,437 million, reflecting expansion of coverage to 330 districts and improved means of implementation. There are many important challenges ahead, however, for the program to fully realize its objectives. The urgent needs are to minimize corruption, to increase transparency of wage payments, to further increase the number of person-days of work per household, to decrease the administrative costs in running the program, and to further increase land productivity and growth rate in agricultural output (Mehrotra 2008: 30–32).

#### CONCLUSION

Full employment is a necessary ingredient for equitable growth outcomes. An effectively designed employment guarantee program can provide a universally accessible social safety net, while contributing to social and economic developmental goals. Such a program need not come at the expense of other social transfers or infrastructure investment. To put the economy on an equitable growth path there must be adequate education, healthcare, and social grants available to mitigate poverty and improve the quality of life of the working poor. Underpinning this should be fiscal and monetary sovereignty and floating exchange rates to enable governments to effectively engage domestic policy.

For economies lacking monetary sovereignty and with fixed exchange rates, other financing modalities can be utilized. "Functional finance" can be replaced with "sound finance" for nonsovereign currency countries with floating exchange rates (such as the member states of the Eurozone and those constrained to enter the Eurozone membership,

as well as those countries with sovereign currency, but with fixed exchange rates). A combined modality of sound finance, together with international aid—such as Overseas Development Assistance (ODA) for low middle-income (Mexico) and low-income countries (post-conflict countries)—can be the more appropriate financing mechanism. Finally, for the resource wealthy nations, a portion of the resource revenue can be used for financing ELR programs. Iran, Iraq, and Russia (oil producers); South Africa (diamond and gold); Brazil and Chile (minerals and metals); and Brazil and China (financial reserves) come to mind in the last category as good candidates for such financing.

How can an ELR program be implemented in a developing economy? The usual characteristics of some developing economies are: (i) abundant underutilized labor; (ii) production that is limited to a small range of commodities; (iii) exports that are limited; (iv) imports are substantial; (v) the informal sector is significant with large wage disparities from the formal sector; (vi) the administrative capacity of the national government is limited; (vii) domestic infrastructure is inadequate to facilitate expansion of productive capacity; and (viii) the exchange rate is most likely pegged (Wray 2007).

These characteristics, when considered within the required framework of achieving the Millennium Development Goals as adopted by a United Nations General Assembly resolution, present serious challenges ahead. Even though there is no specific employment goal in the MDGs, a subsequent general assembly resolution recognized the goal of full and productive employment.<sup>3</sup> The inclusion of full and productive employment and decent work for all as part of the MDGs notwithstanding, a properly designed ELR program can contribute toward the realization of all MDGs as is shown in table 3.

The implementation of an ELR program for developing countries is, nevertheless, particularly challenging and will most likely need to be accomplished in stages. The program's monetary wage must be equal to the average wage in the informal sector and

<sup>&</sup>lt;sup>3</sup> United Nations General Assembly Resolution 60/1 and the 2006 Economic and Social Council, E/2006/L.8 state that the UN must "Make full and productive employment and decent work for all, including for women and young people, a central objective of relevant national and international policies and national development strategies and to be part of efforts to achieve the internationally agreed development goals, including the Millennium Development Goals" (quoted in Kregel [2006]).

should include some market provision of necessities, for example, domestically produced food and clothing, shelter, and other basic services (Wray 2007). Priority needs to be given to infrastructure development to reduce business costs and attract private investment. Each community project should be administered and supervised locally and should not compete with the private sector. Finally, financing and technical assistance will be needed through international aid, and the majority of expenditures should be directed to domestically produced goods with no impact on goods imports.

As a final word, we should be reminded that when work disappears, it weakens and destroys the human condition by decreasing human and social capital, increasing poverty, disempowering even further the disenfranchised and women, and insuring social exclusion. An employer of last resort policy is likely to reverse these effects.

#### REFERENCES

- Acharya, S. 1990. The Maharashtra Employment Guarantee Scheme: A Study of Labour Market Intervention. International Labour Organization. New Delhi: ARTEP.
- Antonopoulos, R. 2007. "The Right to a Job, the Right Types of Projects: Employment Guarantee Policies from a Gender Perspective." Working Paper No. 516. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Beveridge, W. 1945. Full Employment in a Free Society. New York: Norton.
- Bluestone, B., and T. Ghilarducci. 1996. *Making Work Pay*. Public Policy Brief No. 28. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Bureau of Labor Statistics (BLS). 2008. "The Employment Situation: August 2008." Washington, D.C.: U.S. Government Printing Office.
- Forstater, M. 1999. *Public Employment and Flexibility*. Public Policy Brief No. 30. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Garfinkel, I. 1973. "A Sceptical Note on 'The Optimality' of Wage Subsidy Programs." *American Economic Review* 63(3): 447–53.
- Godbole, M. 1990. *Rural Employment Strategy: A Quest in the Wilderness*. Bombay: Himalaya Publishing House.
- Hammermesh, D.S. 1978. "Subsidies for Jobs in the Private Sector." in Palmer, J. (ed.) *Creating Jobs.* Washington, D.C.: Brookings Institution.
- Haveman R.H., and J.L. Palmer. 1982. *Jobs for Disadvantaged Workers*. Washington, D.C.: Brookings Institution.
- Hirway, I., and P. Terhal. 1994. *Towards Employment Guarantee in India*. Indo-Dutch Studies on Development Alternatives. New Delhi: Sage Publications.
- Kaboub, F. 2007. "Employment Guarantee Programs: A Survey of Theories and Policy Experiences." Working Paper No. 498. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Kaldor, N. 1936. "Wage Subsidies as a Remedy for Unemployment." *Journal of Political Economy* 44(6): 721–42.
- Kostzer, D. 2007. "Argentina: A Case Study on the Plan *Jefes y Jefas de Hogar Desocupados*, or Employment Road to Recovery." Working Paper No. 534. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

- Kregel, J. 2006. "ELR as an Alternative Development Strategy." Presentation at The Levy Economics Institute conference *Employment Guarantee Policies*—*Theory and Practice*, October 13–14.
- Lerner, A.P. 1943. "Functional Finance and the Federal Debt." *Social Research* 10(1): 38–51.
- Mehrotra, S. 2008. "NREG Two Years On: Where Do We Go from Here?" *Economic and Political Weekly* 43(31): 27–35.
- Minsky, H.P. 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.

———. 1971. "Where Did the American Economy—and Economists—Go Wrong?" Unpublished manuscript.

———. 1965. "The Role of Employment Policy." in Gordon, M.S. (ed.) *Poverty in America*. San Francisco: Chandler.

- Mitchell, W. 1998. "The Buffer Stock Employment Model and the NAIRU: The Path to Full Employment." *Journal of Economic Issues* 39(1): 235–44.
- Papadimitriou, D.B. 1998. "(Full) Employment: Theory and Practice." Working Paper No. 258. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.
- Petty, W. 1899. *The Economic Writings of Sir William Petty*, Vol. 1 (1662). Cambridge, UK: Cambridge University Press.
- Phelps, E.S. 1997. Rewarding Work. Cambridge, MA: Harvard University Press.
- Pigou, A.C. 1933. The Theory of Unemployment. London: Macmillan.
- Sen, A. 1999. *Development as Freedom*. New York: Knopf; Oxford and Delhi: Oxford University Press.
- Tcherneva, P., and L.R. Wray. 2005a. "Employer of Last Resort: A Case Study of Argentina's *Jefes* Program." Working Paper No. 41. Kansas City, MO: Center for Full Employment and Price Stability.

——. 2005b. "Is Argentina's *Jefes de Hogar* an Employer of Last Resort Program?" Working Paper No. 43. Kansas City, MO: Center for Full Employment and Price Stability.

Tobin, J. 1966. "The Case for an Income Guarantee." Public Interest 1(4): 31-41.

- Tobin, J., J. Pechman, and P. Mieszkowski. 1967. "Is Negative Income Tax Practical?" *Yale Law Journal* 77(1): 1–27.
- Wray, L.R. 2007. "The Employer of Last Resort Programme: Could It Work for Developing Countries?" Economic and Labour Market Papers No. 5. Geneva: International Labour Organization.

——. 1997. "Government as Employer of Last Resort: Full Employment without Inflation." Working Paper No. 213. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

| TABLE 1. A Hypothetical ELR Program in the United States: |  |
|---|--|
| Costs and Benefits  |  |

| Number of ELR workers   | 7 million   |
|-------------------------|---|
| Wage rate with benefits | \$10 per hour   |
| Annual wage bill        | \$145.6 billion   |
| GDP                     | \$15,000 billion  |
| Annual cost as % of GDP | Less than 1%  |
| Multiplier              | 2.0   |
| Multiplier effect       | 145.6 x 2 = \$291.2<br>billion annual<br>addition to GDP or<br>1.94% of GDP |

| Programs      |   |  |  |
|---------------|---|--|--|
| Country       | Year  | Program Description  |  |
| Argentina     | 2002 onwards                                  | Head of households plan ( <i>Jefes de Hogar</i> ): offered households with children under 18 upto 20 hours of work per week.   |  |
| Australia     | 1940–1970                                     | Keynesian Commonwealth Employment Service: delivered an average of 2% unemployment; in contrast to unemployment hovering near 9% in the 1990s and over 4% presently.   |  |
| Bolivia       | 1986–90                                       | Emergency Social Fund: engaging beneficiaries in public works and infrastructure.  |  |
| Botswana      | 1980s onwards                                 | Labor-Based Relief Programme and Labor-Intensive Rural Public Works Programme.   |  |
| Chile         | 1975–1987                                     | The minimum employment program was a public works programs developed to combat 30% unemployment and employed up to 13% of the workforce.   |  |
| France        | Conceptualized<br>in 1984,<br>piloted in 2005 | "Professional Transaction Contracts" first proposed by Jacques Attali in<br>1984. Pilot programs began in six districts (2005) and are currently being<br>evaluated before being officially adopted nationwide.  |  |
| Ghana         | 1988 onwards                                  | Program of action to mitigate the social costs of adjustment, largely involving labor-intensive construction.  |  |
| India         | 1972, 2005                                    | Maharashtra Employment Guarantee Scheme: guarantee manual work to<br>any applicant.<br>National Rural Employment Guarantee Act: offers 100 days of<br>employment to rural households.  |  |
| Indonesia     | Relaunched in 1998                            | <i>Padat Karya:</i> programs involving poverty alleviation and emergency job creation measures in response to Asian crisis; small-scale infrastructure projects.   |  |
| Korea         | 1997–1998                                     | Master plan for tackling unemployment: emergency public works programs for low-skill workers following the East-Asian crisis.  |  |
| Mexico        | 1995 onwards                                  | <i>Programa de Empleo Temporal</i> : community development through<br>intensive use of unskilled labor for social and productive infrastructure.<br>By 2000, the program had increased to one million beneficiaries.   |  |
| Morocco       | Since 1961                                    | The <i>Promotion Nationale</i> has been successfully operating for over 45 years. The program focuses on the development of rural communities, the Saharan and South Provinces, and has had consistent annual increases in working days.                               |  |
| Nepal         | 1989  | Dhaulagiri irrigation development project.   |  |
| Peru          | 1991–1995                                     | <i>Programa de apoyo al ingreso temporal:</i> a public works program focusing primarily on women (at one time employed 500,000).   |  |
| South Africa  | 2004 onwards                                  | The expanded public works program seeks to reorient existing<br>departmental expenditure in ways that maximize jobs creation in<br>environmental, infrastructure, and social sectors.  |  |
| Sri Lanka     | 1985 onwards                                  | National housing development authority: engages urban communities in housing and infrastructure development.   |  |
| Sweden        | 1938–1970                                     | Program focused on the "socialization of investment" and offered an alternative to welfareism by emphasizing the "right to work" rather than the "right to income." Unemployment rates remained below 3 percent until the late 1980s, when the program was dismantled. |  |
| United States | 1933–1936                                     | New Deal public works programs (WPA, PWA, CWA).  |  |
| Zambia        | 1991 onwards                                  | Microproject unit targeted the poor and focused on the maintenance of existing infrastructure.   |  |

 TABLE 2. International Experience of Government Job Creation: Selected

 Programs

Sources: Antonopoulos (2007) and author's analysis

**TABLE 3. Employment of Last Resort Programs and the Millennium Development Goals** 

| MDG  | ELR design element   | Example   |
|--|--|---|
| MDG 1:<br>Eradicate Extreme<br>Hunger and<br>Poverty                 | <ul> <li>Wage income benefit;</li> <li>Beneficiaries can be engaged in<br/>development of community gardens<br/>and other agricultural practices.</li> </ul>   | <ul> <li>Argentina effectively reduced the incidence of indigence by 25%.</li> <li>South Africa: The Working for Water program engages beneficiaries in development of community gardens.</li> </ul>  |
| MDG 2:<br>Universal Primary<br>Education                             | <ul> <li>Wage income benefit;</li> <li>Program entry requirement;</li> <li>Work/education options;</li> <li>Beneficiaries can be engaged in school construction/maintenance activities.</li> </ul>   | <ul> <li>Argentina: Beneficiaries were required to<br/>register their children in school.</li> <li>Argentina: Options were also given for<br/>beneficiaries to complete secondary<br/>schooling.</li> </ul>   |
| MDG 3:<br>Promote Gender<br>Equality and<br>Empower Women            | <ul> <li>Benefit of wage income;</li> <li>Gender-targeting design elements;</li> <li>EGS effectively draw women into the labor force.</li> </ul>   | <ul> <li>South Africa, Argentina, and India all successfully draw women into the labor force.</li> <li>South Africa sets social equity targets for program participation: 40% female, 30% youth, 2% disabled.</li> </ul>  |
| MDG 4:<br>Reduce Child<br>Mortality                                  | <ul> <li>Wage income benefit;</li> <li>Program entry requirement;</li> <li>Compulsory education/training<br/>programs;</li> <li>Beneficiaries can be engaged in<br/>development of water and crèche<br/>related infrastructure.</li> </ul> | <ul> <li>The <i>Jefes</i> program has a child vaccination program entry requirement.</li> <li>South Africa: Childcare for the children of workers is critical both in terms of protecting the safety of children and releasing women into the workforce. A partnership with the Department of Welfare assists in the setting up of crèches in rural areas.</li> </ul> |
| MDG 5:<br>Improve Maternal<br>Health                                 | <ul> <li>Wage income benefit;</li> <li>Compulsory education/training programs;</li> <li>Beneficiaries can be engaged in auxiliary community care activities.</li> </ul>  | <ul> <li>Maternal health care education programs could improve maternal health by prevention.</li> <li>South Africa: Working for Water projects joined forces with the Planned Parenthood Association and UNFPA to provide reproductive health care training and support to workers.</li> </ul>   |
| MDG 6:<br>Combat<br>HIV/AIDS,<br>Malaria, and<br>Other Diseases      | <ul> <li>Compulsory education/training<br/>programs;</li> <li>Beneficiaries can be engaged in<br/>auxiliary community care activities.</li> </ul>  | <ul> <li>South Africa: The EPWP actively<br/>engages beneficiaries in sexual health<br/>education programs.</li> <li>South Africa: The Home Community<br/>Based Care (HCBC) program provides<br/>basic care services to the sick and elderly.</li> </ul>  |
| MDG 7:<br>Ensure<br>Environmental<br>Sustainability                  | <ul> <li>Engage beneficiaries in<br/>environmental remediation and<br/>development of water- and housing-<br/>related infrastructure.</li> </ul>   | • India and South Africa: Both programs<br>engage beneficiaries in a full range of<br>environmental remediation activities.   |
| <b>MDG 8</b> :<br>Develop a Global<br>Partnership for<br>Development | <ul> <li>Youth targeting design elements;</li> <li>Learning from the international<br/>experiences of job creation programs.</li> </ul>  | • South Africa sets social equity targets for program participation: 40% female, 30% youth, 2% disabled.  |

A suitably designed ELR can also be designed to contribute to....