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Environment and Employment

A reconciliation

Philip Lawn

Environment and Employment: A Reconciliation

Edited by

Philip Lawn

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First published 2009
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
270 Madison Avenue, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2009 Philip Lawn

Typeset in Times New Roman by Prepress Projects Ltd, Perth, UK
Printed and bound in Great Britain by TJI Digital, Padstow, Cornwall

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
Environment and employment: a reconciliation/[edited by] Philip Lawn.
p. cm.
I. Environmental economics. 2. Gross domestic product. I. Lawn, Philip A.
HC79.E5E5685 2009
331.1—dc22
2008044654

ISBN10: 0-415-44879-4 (hbk)
ISBN10: 0-203-87919-8 (ebk)

ISBN13: 978-0-415-44879-6 (hbk)
ISBN13: 978-0-203-87919-1 (ebk)

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7 Evaluating the economic and environmental viability of Basic Income and Job Guarantees

Pavlina R. Tcherneva

Introduction

Basic Income and Job Guarantees are two proposals in the public interest, which rest on the conviction that universal and unconditional policies are more effective and fair than targeted and means-tested programmes. Supporters of these proposals consider modern welfare and labour market policies to be inequitable and inefficient, and therefore advocate an open-ended commitment to guarantee the right to livelihood for all individuals. Both policies aim to enhance individual freedom, economic opportunities, democratic citizenship, and promote social inclusion via poverty eradication, human capital investment, community revitalisation, and environmental renewal. How to reach these goals, however, is vigorously contested.

Briefly, Basic Income supporters see modern economies as moving towards increasingly precarious labour markets and argue that jobs cannot be the answer to a better life (Aronowitz and DiFazio, 1994). In addition, whereas some individuals are exempt from having to work (thanks to inheritance, for example), others are compelled to work, often in 'bad' jobs, for their livelihood. Therefore, it is argued that any social policy which enhances *real freedom* must give individuals equal access to nature's endowments via a guaranteed income but without the coercion to work for it (Van Parijs, 1995). Such a policy would further emancipate them from obligatory employment by empowering them to say 'no' to demeaning or compulsory labour (Widerquist, 2004). In this sense, capitalism is viewed as inherently unjust, in large part because of the dependency on work for income. Thus, the core objective of the Basic Income policy is to sever the link between the two.

By contrast, Job Guarantee supporters argue that Basic Income advocates have misconstrued the problem of income insecurity (Harvey, 2003; Mitchell and Watts, 2004). A well-structured guaranteed employment that offers opportunities for meaningful work at a living wage counters the precariousness of the labour market by eliminating unemployment, drastically reducing poverty, and enhancing the individual freedom to say 'no' to bad jobs. In other words, in a monetary market economy, many of the observed labour market problems stem from an

insufficient quantity and quality of jobs. Only after the right to work has been secured for all can we adequately evaluate the failures of the market and welfare policies (Harvey, 2003). Securing the right to work is the over-riding objective for Job Guarantee advocates.

Some important criticisms have been levelled at the economic viability of Basic Income proposals. The main charge is that they are inherently inflationary with potentially disastrous consequences for a nation's currency. Additionally, the strong destabilising effect of Basic Incomes on labour markets and wages makes the policy potentially stagflationary and hyperinflationary (Mitchell and Watts, 2004; Tcherneva 2006a).

The goal of this chapter is therefore threefold. First, it explores the macroeconomic viability of each programme in the context of modern, monetary, production economies. Second, it elaborates on their environmental merits. Finally, in the hope of consensus building, it advances a joint policy proposal that is economically viable, environmentally friendly, and socially just.

Can we pay for Basic Income or Job Guarantees?

Throughout this chapter, two specific policy proposals will be discussed. The first is the Basic Income Guarantee (BIG) and involves a universal payment to each citizen irrespective of race, gender, marital status, or labour market participation, which is set at a level sufficient to afford everyone the basic material standard of living.¹ The second is the Job Guarantee proposal, which offers a federally funded job to anyone ready, willing, and able to work but who has not found desired private sector employment. It provides a living wage and decent working conditions. The programme is modelled after the following proposals: the public service employment (PSE) scheme; the government acting as an employer of last resort (ELR); and the buffer stock employment (BSE) model.²

False notions of public finance are perhaps the single most important obstacle to implementing important government policies. Much has been written on how governments can finance Basic Income and Job Guarantees.³ Such discussion is technically relevant only for countries which have given up sovereign control over their currencies (e.g., where the currency is under the control of a currency board or some other fixed exchange rate regime). Sovereign currency nations, which the majority of the countries in the world are, do not face operational financing constraints. To be sure, they face political constraints, which could be shaken off with full appreciation of the workings of sovereign currencies. Although the ideology of the 'tax-payer's money' is entrenched in all contemporary discourse, it is crucial to dispel its false premises and to understand adequately the nature of the universal guarantees. This is the purpose of this section.

There is a large body of literature that has examined the principles of sovereign finance.⁴ Three specific tenets need to be emphasised here. First, taxation and spending are always two independent operations but, under flexible exchange rate regimes, the former does not and cannot finance the latter. A sovereign currency

nation can always pay for its public programmes of choice, be they Basic Income or Job Guarantees, or any other programme, irrespective of tax collections. This does not mean, however, that tax collections are unimportant.

The second point to emphasise is that, although money emission does not depend on taxes, tax collections are crucially important for maintaining the viability of the currency. In fact, in monetary production economies, the value of the currency is linked to what one must do to obtain it (for repayment of taxes or other obligations), and the public sector can directly set its terms of exchange and, in doing so, affect its value. Third, in a modern market economy, unemployment is always and everywhere a monetary phenomenon that can be effectively addressed with a proper application of sovereign finance.

Sovereign currency control

A common mistake made by many observers is to conflate government with non-government finance. Whereas the private sector is indeed restricted by revenue or by borrowing for its spending, this is not the case for the public sector since it 'finances' its expenditures in its own money. This simply reflects the single-supplier (or currency monopoly) status of a central government. As the tax-driven approach to money has made clear, the purpose of taxation is not to 'finance' state spending, but rather to create a demand for the currency of the sovereign. In modern economies, such as in the United States, the United Kingdom, and Japan, the currency (the dollar, the pound, and the yen, respectively) is not a 'limited' resource of the government (Mosler, 1997–1998: 169). The consolidated government (with the treasury and the central bank as its agents) conducts its spending by crediting private bank accounts. It taxes the private sector by debiting them. Thus, taxation functions not to finance government spending but to create demand for otherwise unbacked state currencies. This way, the money-issuing authority can purchase requisite goods and services from the private sector. Taxation is, in a sense, a vehicle for moving resources from the private to the public domain.

If the purpose of taxation is to create demand for state money then, logically and operationally, tax collections cannot occur until the government has provided that which it demands for payment of taxes. In other words, not only are spending and taxation two entirely independent operations, but the former must necessarily precede the latter. Another way of seeing this causality is to say that government spending 'finances' private sector 'tax payments' and not vice versa.⁵

In sum, sovereign governments have a public monopoly over the domestic currency. Government spending precedes taxation whereas spending always creates new high-powered money (HPM). Taxation, on the other hand, always destroys HPM. Therefore taxes are never stockpiled and cannot be re-spent to 'finance' future expenditures. This also means that a government's budget status is an *ex post* accounting result. A 'budget-neutral' policy aims to gauge some subsequent accounting result but provides no a priori knowledge of the economic consequences of that policy.

Although governments may not be operationally constrained in their spending, it is crucially important what programmes they choose to finance. As sole suppliers of a fiat currency, they also have the responsibility for maintaining its value, and certain policies are better suited to doing this than others.

The value of the currency

Taxes not only create private sector demand for government money, but also impart value to it. Innes (1913: 165) stresses that: 'A dollar of money is a dollar, not because of the material of which it is made, but because of the dollar of tax which is imposed to redeem it.' He also argues that 'the more government money there is in circulation, the poorer we are' (161). In other words, if government money in circulation far exceeds the total tax liability, the value of the currency will fall (i.e., inflation will take place). Thus, it is not only the requirement to pay taxes, but also the difficulty of obtaining that which settles the tax obligation, that gives money its value.

This important relationship between leakages and injections of HPM is difficult to gauge. Since the currency is the product of a public monopoly, the government has a direct method at its disposal for determining a currency's value. For Knapp, payments with state fiat measure a certain number of units of value (Knapp, [1924] 1973: 7–8). For example, if the state required that, to obtain one unit of HPM, a person must supply one hour of labour, then money will be worth exactly that – one hour of labour (Wray 2003: 104). Thus, as a monopoly issuer of the currency, the state can determine the value of the latter by setting 'unilaterally the terms of exchange that it will offer to those seeking its currency' (Forstater and Mosler, 1999: 174).⁶

What this means is that the state has the power to exogenously set the price at which it will provide HPM – i.e., the price at which it buys assets and goods and services from the private sector. Although it is hardly desirable for the state to set the prices of all goods and services it purchases, it nonetheless has this prerogative. As will be discussed later, through the Job Guarantee, the money monopolist need only set *one* price to anchor the value of its currency. By contrast, the Basic Income Guarantee does not set any terms of exchange for the sovereign currency; instead, it provides it unconditionally.

Unemployment is a monetary phenomenon

The last point to make in this section is that unemployment is a monetary phenomenon. This has been well demonstrated by Keynes in the *General Theory*, but the tax-driven approach to money sheds new light on what Keynes meant by 'money is a bottomless sink of purchasing power . . . [and] there is no value for it at which demand [for it] is diverted . . . into a demand for other things' (Keynes, 1936: 231).

Government deficit spending necessarily results in increased private sector holdings of net financial assets. If the non-government sector chronically desires

to save more than it invests (i.e., run a budget surplus), the result will be a widening demand gap (Wray, 1998: 83). This demand gap cannot be filled by other private sector agents because, in order for some people to increase their holdings of net savings, others must decrease theirs. In the aggregate, an increase in the desire to net save can be accommodated only by an increase in government deficit spending. Mosler explains:

Unemployment occurs when, in aggregate, the private sector wants to work and earn the monetary unit of account, but does not want to spend all it would earn (if fully employed) on the current products of industry . . . Involuntary unemployment is evidence that the desired holding of net financial assets of the private sector exceeds the actual [net savings] allowed by government fiscal policy.

(Mosler, 1997–98: 176–177)

Similarly, Wray concludes that

unemployment is *de facto* evidence that the government's deficit is too low to provide the level of net saving desired. In a sense, unemployment keeps the value of the currency, because it is a reflection of a position where the government has kept the supply of fiat money too scarce.

(Wray, 1998: 84)

Although mainstream economists argue that governments must force slack on the economy in order to maintain the purchasing power of the currency, as this chapter will explain, well-designed full employment policies can do the job.

To sum up, a sovereign government is not operationally constrained in terms of funding public programmes. But the money monopolist also has the responsibility of maintaining the value of the currency. Because, at present, it does not set the terms of exchange for its currency, it uses unemployment to maintain its purchasing power. Unemployment is a monetary phenomenon and a reflection of keeping the currency too scarce. With this in mind, we can evaluate the economic impacts of implementing Basic Income and Job Guarantees.

Macroeconomic consequences of the Basic Income Guarantee

A focal point of the Basic Income proposal is its budget-neutral stance (Atkinson, 1995; Van Parijs, 2004). Such an analysis presumably stems from efforts to quash neoliberal objections to government deficit spending (Mitchell and Watts, 2004: 8). This section argues that a preoccupation with budget neutrality is wrong-headed for two reasons. First, it obfuscates the inflationary nature of a BIG by relying on conventional notions of public finance. Second, because taxes are largely endogenous, attempts to 'raise' sufficient tax revenue to counterbalance the increased spending on a BIG are likely to be self-defeating with perverse macroeconomic effects.

Inflation: an inherent feature of the BIG

As the tax-driven approach to money makes clear, taxes impart value to the currency by creating demand for it. Additionally, a currency's value is determined by what is required to obtain it. In the case of a BIG, there is no such requirement, since income payments are disbursed universally and unconditionally. If a programme is instituted whereby the population can obtain freely the unit which fulfils the tax obligation, the value of the currency will deteriorate sharply. Although this may not happen immediately, over time the value of an unconditionally provided currency will ultimately tend to zero. It must be stressed that the Basic Income is inflationary not because it is financed by 'fiat' money but because the currency is essentially 'free' (Tcherneva and Wray, 2005a) and is supplied on demand to all. Therefore, it effectively invalidates the purpose of taxation – to create demand for the government's currency. We can then easily envision a scenario in which the currency loses its value and private sector agents re-price their transactions in terms of some other (stronger) currency. History is replete with such examples: the inability to collect income and corporate taxes in Russia in the late 1990s; the provision of 'free' currency through uncollateralised lending in Eastern Europe during the transition period; and the accelerating interest rate payments on public debt in Turkey in the 1990s. In each case, the policy instituted resulted in a collapsing domestic currency and the 'flight' to stronger foreign currencies (for details, see Mitchell, 2002; Hudson, 2003; Tcherneva, 2006a).

It is not only the fact that the currency is free that produces a destabilising effect. A Basic Income Guarantee that buys the minimum standard of living (suppose that amount is equal to \$20,000 in the United States) will cause an exodus of those workers in the labour force who previously 'earned' their minimum standard of living by working. In other words, workers in most \$20,000-paying jobs will opt out of the labour force, especially if they are 'bad' jobs. Given this, the next issue to investigate is the impact of Basic Income Guarantees on labour force participation and economic activity.

The impact of the BIG on government budgets, wages, prices, and the labour force

Since tax collections are largely endogenous, the preoccupation with the budget neutrality of BIG policies can produce tax schedules that may have perverse market effects. In fact, it may prove impossible for the BIG proposal to remain budget neutral.

Some have proposed, for example, that the Basic Income Guarantee be 'financed' by a flat tax (Atkinson, 1995; Clark, 2004). It is reasonable to expect that a guaranteed Basic Income of \$20,000 will induce some people in 'bad' \$20,000-paying jobs to exit the market – a desirable effect, according to BIG advocates. The resulting impact on employment, income, and tax collections will be negative. As tax revenues fall, a budget deficit results and, although the deficit does not pose a problem in itself, the compulsion will be to raise tax rates to

achieve the originally intended budget neutrality. This tax increase will induce a new cohort of workers previously earning an after-tax income of \$20,000, but now earning less than \$20,000 because of the tax increase, to leave the labour market to live off the BIG benefit. All additional tax increases that are imposed to recoup the cost of rising BIG payments will further erode employment and output (again, with a logical limit of zero).

If taxes are progressive, as advocated by Aronowitz and Cutler (1998) and Aronowitz and DiFazio (1994), this substitution effect may take somewhat longer to materialise. However, if they are regressive, as proposed by Van Parijs (1995) and Meade (1989), the labour force drop-out rate will be considerably higher, since regressive taxes carry larger disincentives to work in low-wage jobs. In any event, the BIG will be unlikely to achieve budget neutrality because tax collections are endogenous and forever unable to catch up with the rising BIG benefit payments.

The impact on the labour force and output is also negative. This seemingly 'voluntary' exit from the labour force is the BIG's solution to unemployment. This is a contrived result, however, as full employment is achieved by conceiving an artificial reduction in the labour supply (Mitchell and Watts, 2004: 13). In effect, full employment takes the form of 'forced inactivity'. In order to coax BIG recipients back into the labour market, some employers will need to offer higher wages. At first approximation, this appears to be a desirable effect. However, soon thereafter, the same employers will also raise prices to cover their increasing wage costs. As a consequence, rising prices will erode the purchasing power of the BIG payment and undermine the economic conditions of its recipients. To maintain the objective of the universal guarantee and to provide a minimum necessary standard of living, there will be pressure to revise the BIG benefit upward. Such a move will induce an additional exit of workers from the labour market, lower output levels, and lead to another compensatory rise in wages and prices. The latter, of course, will further reduce the BIG's purchasing power. This vicious cycle renders the income guarantee self-defeating. Note that, if the benefit is continually increased, the income guarantee becomes not just inflationary, but hyperinflationary.

Consider the impact if the government continues to increase taxes to achieve budget neutrality. Workers remaining on the margins of the labour market will exit the labour force. This will further reduce the labour force participation rate and leads to increasingly lower output, lower employment, and much higher prices than before the BIG was implemented. Should policy-makers continually increase the BIG to compensate recipients for the loss of purchasing power and simultaneously increase taxes to 'fund' the ensuing rise in expenditures, the likely result is stagflation – the dreaded combination of low employment and high prices.⁷

Since the BIG never quite manages to give people the purchasing power necessary to meet their basic material requirements, some individuals will be forced back into the labour market, quite possibly into 'bad' jobs. Hence the implementation of BIG is likely to produce an environment characterised by involuntary unemployment and higher prices.

In sum, we have to be mindful of how the government supplies the currency to the population. Misconceptions about public finance produce unwarranted at-

tempts to achieve a budget-neutral BIG, which serves only to gauge some *ex post* accounting identity but says nothing about the impact of the BIG on economic performance.⁸

Macroeconomic effects of the employer of last resort

Keynes argued that 'unemployment develops . . . because people want the moon; men cannot be employed when the object of desire (i.e., money) is something which cannot be produced and the demand for which cannot be readily choked off' (Keynes, 1936: 235). As the tax-driven approach to money further makes clear, unemployment results from the chronic desire of some private sector agents to hoard net financial assets – a desire which can only be accommodated by the public sector. Minsky (1986) recognised that unemployment was a monetary phenomenon and indicated how desired financial resources can be supplied by simultaneously implementing a successful full employment strategy. For Minsky, it is the role of government to divorce the determination of full employment from the profitability of hiring. This can be accomplished only when the government creates an infinitely elastic demand for labour (Minsky 1986: 308).

Lerner (1943: 9) also argued that it was the government's job to keep spending 'neither greater nor less than that rate which at the current prices would buy all the goods that it is possible to produce.' Spending below this level results in unemployment, whereas spending above it causes inflation. The goal is to always keep government spending at the 'right' level to ensure full employment and price stability.

Two policies, virtually identical in design, which embrace Minsky's full employment strategy and Lerner's functional finance approach are the employer of last resort (ELR) proposal (Mosler, 1997–98; Wray, 1998) and the buffer stock employment model (Mitchell, 1998).⁹ These policy prescriptions aim to eliminate unemployment and simultaneously stabilise the value of the currency. The proposals are motivated by the recognition that sovereign states have no operational financial constraints, can discretionarily set one important price in the economy, and can provide an infinitely elastic demand for labour.

Through the ELR, the government sets only the price of public sector labour, allowing all other prices to be determined in the market (Mosler, 1997–1998: 175). The fixed public sector wage provides a sufficiently stable benchmark for the value of the currency (Wray 1998: 131). Since governments are not fiscally constrained, the programme is implemented on a fixed-price/floating-quantity rule – namely, the hiring of labour in the ELR is not limited by budget caps, and spending on the ELR fluctuates counter-cyclically. Therefore, the key macroeconomic merits of the ELR, which are missing from BIG proposals, are its ability to stabilise the business cycle as well as the value of the currency and the overall price level. We shall now consider these macroeconomic benefits of the ELR in more detail.

The ELR stabilises the business cycle

With the Job Guarantee, government spending on public employment fluctuates counter-cyclically. During downturns in the business cycle, when private business establishments shed workers, the unemployed labour is able to find employment in the public sector. Government spending automatically increases, thereby providing the necessary economic stimulus to ensure full employment is maintained. Conversely, as the economy improves, and private sector employment expands, workers are lured away from the ELR pool, thus reducing government deficit spending. This counter-cyclical spending behaviour serves as a powerful automatic stabiliser that ensures government spending is always at the 'right' level to maintain full employment. By contrast, the Basic Income Guarantee has a destabilising effect on the business cycle due to its inflationary bias and the negative impact on labour force participation rates and aggregate output.

The ELR fixes the value of currency

Since the value of the currency is determined by what must be done to obtain it, with an ELR in place, it is linked to the public sector wage. Suppose the government pays an ELR employee \$20,000 per year (for approximately 2,000 hours of work). The value of the currency will be anchored by the effort expended to earn this income. That is, the benchmark value of the currency will be \$10 per hour of work. Now, suppose the government decides to pay \$40,000 to ELR workers. The hourly wage jumps from \$10 to \$20 per hour. It now takes workers half the time to earn what they previously earned before the increase in the ELR wage. All else being equal, the purchasing power of the currency falls by half (i.e., \$10 now purchases half an hour of work). By contrast, if the government cuts the yearly salary to \$10,000, workers will need to work twice as much to obtain the same amount in dollars, which raises the value of the currency.

Purchasing power is measured in terms of the labour units the currency can buy. As with the BIG, the implementation of an ELR will cause a one-time jump in prices. However, since the purchasing power of the currency is tied to the labour hours it can buy, and thus its value does not deteriorate progressively as it does with BIG, there is no imperative to continually redefine the wage upward. The public sector wage provides an internally stable benchmark for prices.

The ELR enhances price stability

Policies of 'priming the pump', such as military Keynesianism, are inflationary, since they primarily hire 'off the top' of the labour pool by competing with the private sector for the most desirable workers (Wray 1998: 179). The ELR, by contrast, hires 'from the bottom' of the labour pool and thus prevents inflationary pressures from building. In fact, the ELR enhances price stability for two main reasons. First, the ELR is a buffer stock programme, which operates on a fixed-price/floating-quantity rule. Second, deficit spending on public service

employment is always set at the right level (i.e., never more than the level necessary to ensure full employment is maintained).

The ELR is a buffer stock programme operating on a fixed-price/floating-quantity rule

Economists usually fear that high levels of employment can introduce uncontrollable wage-price spirals. It is therefore necessary to show how the ELR contributes to wage stability, which, in turn, promotes price stability. As Mitchell (1998) and Wray (1998) have stressed, the key is that the ELR is designed as a buffer stock programme and that it operates on a fixed price/floating quantity rule. The idea of the rule is to utilise labour as a buffer stock so that, like any buffer stock commodity, the programme will stabilise the commodity's price.

In a nutshell, during recessions, jobless workers find employment in the public sector at the fixed ELR wage. Total government spending rises to relieve deflationary pressures. Alternatively, when the economy recovers and non-government demand for labour increases, ELR workers are drawn back into private sector jobs at a premium over the ELR wage. Government spending automatically contracts, thereby relieving any inflationary pressures that might ensue. In other words, when there is an upward pressure on the buffer stock's price, the commodity is sold (i.e., ELR workers return to the private sector), and when there are deflationary forces at work it is bought (i.e., unemployed labour is hired under the ELR scheme). Public sector employment thus acts as a buffer stock that shrinks and expands counter-cyclically.

The ELR programme operates on a fixed-price/floating-quantity rule because the price of the buffer stock (the ELR wage) is fixed and the quantity of the commodity (public sector employment) is allowed to float. The exogenous public sector wage is internally stable and, since labour is a basic commodity (employed directly and indirectly in the production of every commodity type), it serves as a perfect benchmark for all other commodity prices.¹⁰ It is in this sense that the public sector wage provides a stable anchor for prices in the economy. This important inbuilt feature of the ELR programme has no comparable counterpart in income guarantee proposals.

Deficit spending on the ELR is always at the right level

The buffer stock feature of the ELR ensures that government spending is, as Lerner had originally instructed, always at the 'right' level. The tax-driven approach to money explains why there is nothing inherently wrong with government budget deficits.¹¹ For ELR advocates, the 'right' level of deficit spending is that which ensures full employment, and no more. Furthermore, because of its counter-cyclical nature, the Job Guarantee programme also ensures that deficit spending will counteract inflationary or deflationary pressures, not create them.

Inflation and deflation occur when aggregate demand is either too large or too small relative to aggregate production and the productive capacity of the

economy. The key to offsetting these pressures is to boost income and spending to the level sufficient to purchase the entire full employment level of output – no more and no less. By design, the ELR programme guarantees that any resulting budget deficit is never too big or too small. Government spending will increase until unemployment is eliminated, at which point deficits cease growing, thereby ensuring that aggregate demand does not exceed the full employment level of aggregate supply. Conversely, if private sector unemployment grows once more, so does the deficit spending required to bring aggregate demand and the full employment level of output back into equilibrium. In other words, the automatic counter-cyclical and stabilising feature of the ELR programme guarantees that spending will grow only up to the full employment level of output.¹² By contrast, Basic Income programmes cannot claim any such countervailing force to demand-side inflationary pressure.

Employer of last resort projects also support a non-inflationary environment by enhancing human capital and private sector efficiency. Unlike the BIG, the ELR can directly provide for the maintenance and appreciation of human capital by ensuring that training and education are explicit features of any ELR programme. Furthermore, by addressing the problem of unemployment head-on, ELR also reduces the social and economic costs associated with it. Finally, private sector productivity is enhanced by directing ELR projects towards the development of public infrastructure and costly environmental rehabilitation, and by reducing production rigidities linked to high levels of capacity utilisation.

It has been increasingly recognised that public policies must enhance not only macroeconomic stabilisation but also environmental sustainability. The next section specifically focuses on the environmental merits of the BIG and ELR programmes.

Environmental aspects of the Basic Income and Job Guarantees

There is significant common ground that informs the environmental concerns of BIG and ELR advocates. Much of it rests on a rejection of contemporary growth-at-all-costs macroeconomic policies which lead to an unequal distribution of income, wasteful over-consumption in higher income cohorts, and poverty and destitution in lower cohorts.

Growth, income distribution, and the environment

Advocates of the ELR view policies which aggressively and indiscriminately aim to stimulate private investment as destabilising, inflationary, and environmentally damaging. Hence, the private sector is unable to guarantee the attainment and preservation of either full employment or environmental sustainability. For this reason, the public sector has an important role to play in addressing both objectives. The specific proposal advanced by most ELR supporters is that of 'green' public sector jobs (Forstater, 2004). For Basic Income supporters, on the other

hand, eco-friendly outcomes spring naturally from: (a) the expected redistribution toward more equal incomes; (b) subsequent reductions in GDP growth rates;¹³ and (c) the financing of the BIG through pollution and/or resource taxes. I will discuss growth and income distribution first and will return to eco-friendly taxes later.

Continuous growth rests on sustained and rising rates of economic expansion, increasing resource extraction, and their maximum utilisation. The underlying competitive forces of cost minimisation often imply large-scale industrial pollution (as environmental cleanup is expensive and unprofitable), and the uneven income distribution that accompanies modern pro-growth policies induces environmentally damaging activities among the poor (e.g., Haitian and Amazon deforestation). These forces are at odds with environmental sustainability since they ultimately lead to the 'tragedy of the commons' (Lord, 2003).

The BIG is expected to produce environmentally desirable outcomes by equalising the income distribution at the bottom of the income scale. It is therefore argued that the BIG would, for example, eliminate the need for indigenous people in Brazil to log the Amazon rainforests for subsistence. However, it is likely that the wasteful consumption at the top of the income scale would continue unimpeded unless there were both a considerable redistribution of income away from the rich and a decline in overall growth rates.

Advocates of the BIG also believe that growth in GDP would be checked by the fact that the BIG provides an opportunity for workers to withdraw from the labour market and engage instead in non-market activities – an outcome which some believe should be celebrated (e.g., Murray, 1997). If this is a likely scenario, all the negative consequences from a reduction in the labour force discussed above will apply with full force, making the BIG economically infeasible.

An important question to consider is whether the BIG would trigger eco-consciousness. For example, will the logging of the Amazon rainforests cease if a BIG is introduced in Brazil or will the BIG be treated as a source of extra income that could be used to boost consumption above and beyond what is afforded by the minimum guaranteed income? Will a BIG induce American consumers to buy more organic food and fewer sport-utility vehicles, or will the BIG simply enable the poor to join the queues for the next (now affordable) gas-guzzler? And in what way will the BIG encourage companies to opt for environmentally clean technology, especially in the face of rising labour costs caused by a mass exodus of workers from the labour force? None of the supposed environmental benefits envisaged by BIG proponents are guaranteed by the provision of a Basic Income. To be fair, BIG supporters have argued that the programme should be supplemented by other socially desirable policies (e.g., environmental regulations) but, in this case, any environmental benefits will stem from the regulations and not from the provision of the Basic Income. To this end, it is hard to believe that, in modern capitalist economies, the sole provision of income will set in motion an extraordinary chain of events that will entice individuals to voluntarily opt for 'simpler and more environmentally-friendly lifestyles', as it is argued, for example, in Van Parijs *et al.* (2001). The stark reality is that those with the simpler lifestyles are generally those who have no income. Access to a guaranteed income will allow these people

to partake more actively in mainstream society and culture, which is likely to lead to more complex consumption patterns. In such circumstances, the environmental outcomes arising from the introduction of a BIG are ambiguous.

ELR proponents agree that creating jobs at any price – particularly, at the expense of the environment – is not a viable policy option. Minsky (1986) has long argued that getting to full employment by stimulating aggregate demand could lead to inequitable and destabilising outcomes, especially given that indiscriminate pump priming tends to be environmentally unsustainable, inflationary, and an overall unreliable means of achieving and maintaining full employment.

It seems that BIG advocates reject Job Guarantees largely because they falsely equate them with contemporary pro-growth, pro-investment, pro-profit practices. It is perhaps not well understood that ELR programmes are designed to decouple the determination of full employment from any specific level of GDP. At the margin, full employment is secured by the public sector directly hiring all who wish to work, and does not necessarily depend on GDP growth, aggregate demand, investment subsidies, or tax incentives. Growth in GDP is a consequence of, and not a precondition for, full employment. Furthermore, when ELR jobs are designed with the environment in mind, one is effectively redefining growth to include environmentally friendly output and employment.

Note that BIG proposals are still dependent on growth for the source of their financing (e.g., income taxes). Thus, the desire of BIG proponents to check growth is fundamentally at odds with the BIG's dependence on rising GDP to ensure it is adequately financed. Such a conundrum cannot be satisfactorily resolved. As argued above, nations with sovereign and freely floating currencies do not face operational financing constraints, and thus the financing of the BIG need not depend on a particular level of growth. But this is cold comfort for BIG supporters because the same tenets of modern finance immediately render their policy inflationary.

Furthermore, if the BIG indeed proves to be inflationary (or hyperinflationary), it will produce a more unequal income distribution as the poor opt out of 'bad' jobs to live on the Basic Income that, as a consequence of the rising price level, would gradually be eroded. In this case, it is likely that the poor will be anything but emancipated from compulsory work. Indeed, they are likely to be forced back into the labour market. In addition, even if the poor so desire, they may be unable to engage in more environmentally sensitive activities, such as buying locally grown food or ecologically friendly appliances, since most of them will be prohibitively expensive. If so, any environmentally friendly consequences that the access to a Basic Income might generate will evaporate along with the deflated real value of that income.

By contrast, the ELR does not depend on specific levels of GDP growth for its implementation, but stabilises the business cycle, enhances human capital, and improves the investment environment. In addition, its commitment to eco-friendly public service jobs contributes to environmental improvements. What an eco-friendly ELR programme looks like is explored in the next section.

Public service employment and the environment

Advocates of ELR are interested not only in offering unconditional employment, but also in structuring the programme in a way to address very specific economic concerns – namely, environmental degradation, urban blight, gender inequality, deficient elderly and childcare services, and inadequate training and education. The strong environmental concerns stem specifically from the acknowledgement that there is an immediate need to rehabilitate the environment and restore its health which, owing to its open access status, the private sector has no incentive to perform at the requisite level. ELR jobs should be part of a comprehensive programme to assist in achieving environmental sustainability and can be the first and immediate step toward environmental rehabilitation and conservation. Many of these tasks can be undertaken by relatively unskilled labour. Forstater (2004) has called for a 'Green Jobs Corps' as an important model for ELR work, whereby an environmental tax is incorporated explicitly in the proposal and a detailed application of eco-friendly tasks is advanced. Some of the ELR jobs would include reforestation, water, soil, and air restoration, aggressive recycling efforts at the local and national level, insulation and weatherproofing for residential and some commercial buildings, and the conversion to alternative energy of all public industries and institutions.

Separately, evidence is now emerging which shows that cities, municipalities, and nations alike are beginning and will continue to face increasing costs to their economies as they deal with the pressing issue of climate change (Stern, 2006). It has been predicted that moderate sea level increases caused by rising temperatures will inundate coastal regions, thus causing flooding, infrastructure damage, and the possible forced migration of hundreds of millions of people worldwide (Goodstein and Doppelt, 2006). Such large-scale problems will require a timely and comprehensive response. The recent experience in the United States with Hurricane Katrina has demonstrated that it is the public sector which must be best prepared to ameliorate these problems. An organised and ready public Jobs Corps could respond before, during, and after a crisis to minimise its impact. In the case of Hurricane Katrina, ELR workers, had they been available, could have fortified levies and evacuated residents in advance of the storm. Following the disaster, they could have reconstructed ports, piers, and other much needed infrastructure in both the devastated and healthy communities overwhelmed by migrating population. At the time, Vanden Heuvel (2005) called for a new 'New Deal' to rebuild New Orleans. Much of the work that would have been required could have been performed by ELR workers.

Infrastructure in many developed nations is crumbling. For example, in 2007, one-eighth of all highway bridges in the United States were structurally deficient and close to one-seventh were functionally obsolete (Department of Transportation, 2007). In much of the underdeveloped world, non-existent infrastructure is a major obstacle to economic development. An ELR programme can undertake repair and construction of infrastructure at the needed level. In sum, a well-structured ELR can ensure full employment which does not necessarily conflict with environmental goals. In fact, it can enhance the chances of achieving them.

Environmental aspects of the BIG

The environmentally friendly outcomes of a BIG policy are likely to emerge not from the provision of a guaranteed minimum income, but from the resource use and pollution taxes that the BIG's proponents advance as a means to financing it. There are already numerous policies which promote equitable land use and egalitarian resource allocation, including the Sky Trust, the Alaska Permanent Fund, and the Earth Dividend, just to name a few. Each of these represents either equal access by all citizens to Earth's resources (Earth Dividend) or equal access to the profits generated from exploiting these resources (Sky Trust and Alaska Permanent Fund). These programmes, however, are not the same as the BIG discussed in this chapter. Some scholars have proposed that the BIG should be financed through pollution or other ecological taxes (e.g., Van Parijs, 1995).

I would argue that the agenda for tax reform which BIG supporters advocate can be an essential feature of any policy for social reform. What BIG supporters must deal with is the fact that resource or pollution taxes do not suffice as financing instruments for the BIG. If the BIG supporters insist that pollution or any other resource or environmental taxes are required to 'pay' for the BIG programme, the policy will be self-defeating since resource-based taxes cannot be relied upon to provide an income that will afford the minimum necessary standard of living for all citizens.

To demonstrate this, consider the following. A resource-based tax aims to discourage the use of a particular resource. With regard to taxes on pollution or resource use, the most effective tax policy is one which manages to generate the least amount of revenue. That is, it is one which, as intended, deters pollution or depletion of the targeted resource. To therefore link the BIG to such a tax would mean either that: (a) when the tax is successful in protecting the environment, sufficient revenue is not generated to cover all recipients; or (b) the tax is ineffective, and more pollution and environmental abuse is taking place in order to generate sufficient revenue for the BIG coverage. In the latter case, especially if the BIG is very popular, there may even be a perverse incentive to encourage, for example, oil production so that its increased output can later be taxed to keep the BIG fund 'solvent'.

In sum, an environmental tax policy is an important policy objective, but it would be a mistake to structure either the BIG or the ELR so that it is dependent on ecological taxes for its financing. Of course, if a 'bad' resource is taxed (e.g., oil) and the funds are invested in a 'good' resource (e.g., solar or wind energy), then, over the long run, there will be a greater incentive to move from dirty to clean energy. But this is a case of good environmental policy, not an example of how to best secure the minimum required standard of living for all citizens, as has already been demonstrated by the Alaska Permanent Fund, for example, from which individual payments have never exceeded \$2,000 per person annually. Such a 'fund' has proven to be an effective environmental policy, but not an effective Basic Income policy.¹⁴ Again the proposition of this chapter is that, if the Basic Income cannot buy the minimum standard of living for all, the policy is neither effective nor just.

To summarise, as far as BIG supporters are concerned, the universal provision of a Basic Income is the over-riding objective and its 'green' consequences can be expected to ensue naturally. However, it seems more plausible that the environmental benefits of the BIG stem from the tax mechanisms proposed to finance it and not from the provision of income to all. By contrast, for ELR advocates, guaranteeing full employment is essential through targeted job creation into areas that repair, support, and enhance the environment. Eco-friendly activities are explicitly incorporated in the institutional setup of the ELR job programme. Since there are no operational constraints to the funding of either policy, tax reform for environmental purposes is an entirely different matter – a worthy goal in its own right.

The road to participation and the promise for a joint proposal

Since the objective is to provide for all members of society, and not just for the economically active population, a joint proposal is necessary. To be economically viable and environmentally friendly, however, the proposal needs to embody several key ingredients. First, it must tie the provision of income to public service work, in the form of fixed hourly wage. Second, it needs to provide unconditional income support for the young, the elderly, and the disabled. Third, it must be carefully structured to accommodate the biophysical conditions of the environment and to support environmental preservation, rehabilitation, and renewal.¹⁵

Such a proposal is desirable because individual human inactivity, especially due to involuntary unemployment, has far-reaching consequences beyond the single dimension of a loss of income (Sen, 1999: 94). Therefore, the BIG's focus on the provision of income alone will not provide the necessary remedy. By contrast, the ELR's concern with currency stability should not take precedence over the objective of creating 'good' jobs. Given the many common goals that income and Job Guarantees share, a joint proposal that is environmentally sustainable is a promising alternative for providing the requisite material standard of living to all.

There are many sources we can consult when designing such a proposal. For example, Atkinson's 'participation income' (1995) and White's 'civic minimum' (2003) offer some possibilities for marrying the ELR with the BIG.¹⁶ These proposals emphasise the need to define work very broadly, foster social inclusion, enhance human capital, and improve the overall socio-economic situation (Clark, 2003; Fitzpatrick, 2003). Minsky's discussion of the 'the road to participation' also provides some of the ingredients for such a joint policy. For Minsky, the road to participation means creating permanent programmes whose main purpose is to provide 'public services, environmental improvements . . . as well as the creation and improvement of human resources' (Minsky, 1986: 312).

This chapter has explained the economic imperatives that make it necessary to tie the hourly income benefit to an hour of public work. Nonetheless, this coercive feature will still trouble BIG advocates. The challenge therefore remains to design a proposal which enhances individual freedom by allowing people to determine

their own pursuits. One way to do this is to allow the individuals to choose, and even define, the kind of activities they wish to perform. Thus, although involvement in the community is compulsory, the kind of work performed is not.

To see how this can be accomplished, we can turn to the Job Guarantee programme that was recently implemented in Argentina.¹⁷ Although this programme was available only to unemployed heads of households, it offers insights for designing a joint policy. The Argentinean programme (usually referred to as *Jefes*) was intended to deal with the massive poverty, unemployment, and social dislocation that resulted from the 2001–2002 economic crisis.

After the decision was made to fund the Job Guarantee, the Argentinean federal government provided the general guidelines for administering the programme. It devolved the actual management and administration of the programme to the local government level. The municipalities evaluated the general needs of their communities and their available resources. Subsequently, they made requests for proposals for specific projects that would provide the goods and services that were most needed in their communities.

The *Jefes* plan was, nevertheless, started as a form of Basic Income. After all the unemployed heads of households registered for the programme, they immediately started receiving income. In the early transition period, many recipients did not work since it took some time to design, approve, and implement the proposed projects. However, the programme was up and running in four months, and soon thereafter beneficiaries started taking up the newly created public sector jobs.

In fact, most of the actual activities were designed and proposed by NGOs, local government organisations, labour movements, and the unemployed themselves. Importantly, they were provided with the forum and institutional support to allow them to engage in activities of their own choice. Because nutrition was a top priority in the poorest communities, many such projects included community kitchens, bakeries, or pastry shops. Other projects involved conversion of previously barren plots into arable land, where the beneficiaries set up their own agro-cooperatives. Where pollution was a major concern, activities centred solely on landfill cleanup and recycling. Indeed, in some of the poorest areas, residents organised *en masse* to recycle cardboard and plastic from Buenos Aires's large garbage dumps. Some projects used recycled plastic to make toys and Christmas tree ornaments; others collected and repaired old and ragged books and clothes from wealthier neighbourhoods, which were then distributed to newly built community centres in the city's poorest neighbourhoods.

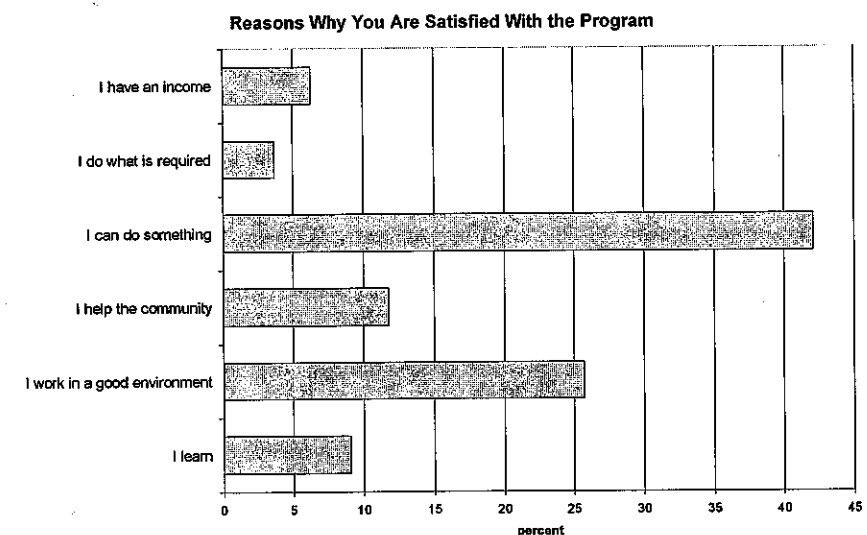
Official surveys of programme participants indicate that receipt of an income is not among the main reasons for satisfaction with the *Jefes* plan. Beneficiaries enjoy being in the programme because they have the opportunity 'do something', to work in a 'good environment', to 'help the community', and to 'learn' (Figure 7.1).

In other words, it is possible to design a programme that will guarantee an income to all, but will require able-bodied persons to participate in community work. Such a programme can be structured to give people considerable freedom

(subject to some general guidelines) to determine the kind of community work they would like to perform. Such activities can include not only helping in the community, but also engaging in individual artistic pursuits. Programmes of this nature can also be motivated by concerns for the environment.

By marrying the participation income with the Job Guarantee, it is possible to design a policy which offers the institutional vehicle for achieving a wide range of desirable social goals. ELR jobs can be oriented to assist in achieving the objectives of environmental rehabilitation, reforestation, and recycling, to provide assistance to young parents with family planning, and to address issues of domestic violence, high school drop-out rates, and spousal and child abuse. In fact, Argentina already provides many examples of public sector projects that deal with all of the above. Once the institutional framework for community work is established, it can be directed to address other social problems as well.

Finally, a joint policy will enjoy prolonged success if motivated by an awareness that valuable work is not only that which is profitable, but also that which is socially useful and environmentally sustainable. In other words, the activities in this programme should be targeted toward adequate social provisioning and not toward profit-making. The 'production for use' in the public sector ought not to compete with the 'production for profit' of the private market. Government jobs should provide services that are presently outside the purview of profit-making enterprises (e.g., environmental rehabilitation, childcare, elderly care, homeless shelters, community kitchens, to name a few).



SOURCE: Ministry of Labor, Employment and Social Security, Argentina

Figure 7.1 Survey of participants of the Argentinean *Jefes* plan

Conclusion

The dichotomy between policies that target 'only income' or 'only employment' is no longer constructive. An effective safety net must provide both a guaranteed source of income and a guaranteed source of work opportunities in meaningful, life-enhancing activities. In a monetary production economy, however, it is important to tie the provision of income to participation in the community of everyone who is willing and able to contribute. But it should be confined to people who are able to contribute. This way, the socio-economic situation can be improved by creating an economically viable policy which stabilises the price level and the business cycle, while also enhancing the meaning of work and individual freedom.

Whether universal guarantees stand a chance depends largely on the political will and dominant ideology; however, the first step is to gain a full appreciation of their macroeconomic consequences and institutional aspects. Only then can we constructively move forward to design economically viable and environmentally friendly universal assurances in the public interest.

Notes

- 1 There are many incarnations of the Basic Income Guarantee. Partial Basic Income and the negative income tax (NIT), for example, will not be discussed here because they are, respectively, either deficient to buy the minimum standard of living or contingent on labour market participation. A full Basic Income, by contrast, is that which is set at the subsistence level (Van Parijs, 1992: 237 n27) or at the official poverty line (Clark, 2004), although, for Van Parijs, maximisation of individual opportunities and freedom requires that it be set at the *highest sustainable level* (Van Parijs, 1992, 1995, 2004).
- 2 There is broad general consensus over the purpose and design of these programmes (see, for example, Harvey, 1989; Wray, 1998; Mitchell, 1998). Although history is replete with direct job creation programmes, they tend to be of limited duration and subject to punitive means tests – two features which Job Guarantee supporters strongly oppose.
- 3 See, for example, debates between Clark (2003) and Harvey (2003).
- 4 This work is largely part of the modern money approach, also known as chartalism, neochartalism, tax-driven money, or money as a creature of the state. The approach is most closely associated with the writings of George F. Knapp ([1924] 1973) and Abba P. Lerner (1947), but finds support in much of the economic literature ranging from Adam Smith to Keynes. For a detailed survey of chartalism, see Tcherneva (2006b).
- 5 It has also been demonstrated that bonds also do not 'finance' government spending. Bond sales maintain the target interest rate by draining excess reserves of high-powered money (HPM), which have been created through government spending (Mosler, 1997–1998; Wray, 1998; Bell, 2000).
- 6 Wray (2003: 104) notes: 'If the state simply handed out HPM on request, its value would be close to zero as anyone could meet her tax liability simply by requesting HPM.'
- 7 Mitchell and Watts (2004: 13) also argue that stagflation is a likely result because of the expected income redistribution and deteriorating inducement to invest caused by the BIG policy.
- 8 See also Abba Lerner (1947), whose proposal for 'functional finance' upheld that policy should be guided not by antiquated notions of 'sound finance', but by the effect of finance on economic activity.

- 9 Employer of last resort (ELR) is Minsky's terminology, which is used throughout this paper as a generic term for direct Job Guarantees.
- 10 This is a key point. If a government attempted to use the price of something not always used in the production and delivery of goods and services to anchor the currency (e.g., silver), it would fail miserably.
- 11 In fact, if the non-government sector runs a surplus (i.e., hoards net financial assets), the government sector, by accounting logic, must run a deficit.
- 12 There has been some confusion about the operation of the ELR (see Sawyer, 2003). It is important to note that ELR eliminates unemployment by offering a job to everyone willing and able to work, not by increasing aggregate demand. Although a rise in aggregate demand may result as a consequence of the program, this does not have to be the case. The government can eliminate unemployment via the ELR while simultaneously reducing its spending on other programmes and raising taxes. This is hardly a desirable recommendation, but it illustrates that ELR can eliminate unemployment in the face of falling aggregate demand. It does so by offering a job, not by 'pump priming' (for details, see Mitchell and Wray, 2005).
- 13 There is no consensus around this outcome.
- 14 Even this outcome is debatable. The Alaska Permanent Fund invests its oil earnings into a portfolio of assets, many of which are in industries that are not eco-friendly. The dividend payment to Alaskans is therefore linked to how profitable these industries are.
- 15 For explanation of these biophysical conditions, see Forstater (2004).
- 16 Fitzpatrick (2003), Galston (2001), and Anderson (2001), among others, support some conditionality purporting that there must be a reciprocal obligation on the part of the Basic Income recipient.
- 17 The institutional details and macroeconomic effects of this program have been discussed in detail in Tcherneva and Wray (2005b).

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