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BASIC INCOME AND THE RIGHT TO WORK:

A KEYNESIAN APPROACH

William A. Jackson

Department of Economics and Related Studies,
University of York, York YO10 5DD, UK

Email: william.jackson@york.ac.uk

Abstract

Among the proposals for radical reform of social policy are basic income, which would pay an unconditional cash benefit to all individuals, and the right to work, which would offer guaranteed employment arranged by the state if necessary. This paper examines the macroeconomic consequences of such reform proposals. It sets up a simple Keynesian income-expenditure model that includes basic income and the right to work as alternative methods of providing social assistance, along with the more traditional approach of paying unemployment benefits. The various schemes are compared and contrasted with regard to their implications for employment, stability, distribution, efficiency and the government budget. Potential benefits of basic income or the right to work are emphasised, despite the political obstacles to implementing them.

Keywords: basic income, right to work, social assistance, welfare, Keynesian economics, employment

Introduction

Unemployment has always been among the main causes of poverty in capitalist economies. When people become unemployed, they normally enter the 'null-income group' whose survival depends on social assistance (Weintraub, 1985). The fortunes of this group, often neglected in economic theory, are critical to social policy and the economy at large. Most income maintenance for the unemployed revolves around cash benefits conditional on unemployment or low incomes. Proposals for radical reform of social policy have suggested alternative arrangements, notably basic income and a right to work.

Basic income can be defined as a cash benefit paid to all individuals regardless of their personal characteristics or employment status. It differs from unemployment benefits in that it is not conditional on unemployment; if paid at a high enough level, it enables people to survive without having to work. The academic literature casts basic income in many different lights and gives it several names, such as citizen's income, universal grant, demogrant, social wage and social dividend (for general discussions, see Clark and Kavanagh, 1996; Offe et al., 1996; Parker, 1989; Purdy, 1988; van Parijs, 1992, 1995; Walter, 1989). Viewed narrowly, it could be just a modest social assistance scheme; viewed expansively, it could bring fundamental social change through a progressive, long-run fall in working hours (van der Veen and van Parijs, 1986). Arguments for basic income, raising diverse economic, political and ethical issues, have portrayed it as a means to efficiency, equality, liberty or fraternity.

Unlike basic income, a right to work or employment guarantee preserves the link between employment and income. Rather than replacing lost income when people become unemployed, it provides employment created by the state as employer of last resort (see, for example, Delsen, 1997; Minsky, 1986; Minsky and Whalen, 1996-97; Mosler, 1997-98; Rustin, 1985, 1987; Sherman, 1995, Chapter 15). Under a statutory right to work, all members of the labour force would be guaranteed employment, so that transfer payments to the unemployed would no longer be needed. Any 'rights' to work might also entail 'duties' to work and contribute to the economy (Gorz, 1989, Part III). The resulting system would

reaffirm employment as the prime income source and might have its own inherent virtues in promoting social solidarity.

Economic discussion of social policy reform has mostly taken a neoclassical line, focused on microeconomic effects. Less has been said about macroeconomic effects, and yet they are crucial for the short-run functioning of the economy. This paper uses a simple Keynesian income-expenditure model to consider the macroeconomic consequences of basic income and a right to work.

Four methods of income maintenance

Income maintenance schemes can be classified according to two features. The first is whether the scheme is cash-based or work-based. A cash-based scheme pays out cash benefits to replace the income lost through unemployment and makes no attempt to replace the employment itself. Social assistance consists of transfer payments that redistribute purchasing power towards the poor. A work-based scheme, by contrast, aims to keep people in work and therefore provides jobs for those who want them. Successful job creation measures will render cash benefits superfluous.

The second feature is whether arrangements are conditional on unemployment. Transfer payments to the unemployed have usually been triggered by their joblessness (or, equivalently, their null-income status) and withdrawn once they return to work. Work-based measures could also be conditional on unemployment, with the state providing a minimum amount of guaranteed work to the unemployed. Basic income offers all individuals a cash payment unconditional on employment or any other characteristic. Likewise, a right to work could offer everyone a minimum amount of work; further work above the minimum would be voluntary and subject to the availability of employment.

Combining the two features yields four types of income maintenance scheme, shown in Table 1. Of the four types, only that in the top left-hand corner of the table – unemployment benefits – is commonly observed. The other three are unfamiliar in practice and have had varying degrees of theoretical discussion.

Table 1 Types of income maintenance scheme

		Method of provision	
		Conditional on unemployment	Unconditional
Basis of provision	Cash	Unemployment benefits	Basic income
	Work	Guaranteed work	Basic work

Basic income, being unconditional, avoids labelling any particular group of benefit recipients as dependent on the rest of society. All citizens receive basic income as an entitlement, and there is no means testing or monitoring of personal characteristics. Ideally, basic income would be enough to sustain an adequate but relatively low living standard. Most people would continue working, which would not be strictly necessary for subsistence but essential for material affluence.

Guaranteed work is provided by the state to anyone unable to find a job in the standard labour market. The state – the employer of last resort – creates a separate class of guaranteed jobs at low wage, skill and productivity levels. People still have an incentive to find better-paid standard employment, but failing that they can fall back on guaranteed work. Membership of the labour force remains voluntary and carries with it the assurance of either employment or guaranteed work. If cash benefits were abolished, a person would have to enter the labour force to acquire a subsistence income. Guaranteed work endorses the link between work and income, imposing a *de facto* duty to work. Those excluded from the standard labour market must participate in work created especially by the state. They are no longer a null-income group and their wage incomes, although low compared with standard employment, are recorded in the national income accounts.

The final possibility, the work-based counterpart of basic income, can be termed 'basic work'. It offers a uniform minimum amount of work undertaken by all members of the labour force. If basic work was compulsory for the whole able-bodied population, then it would be a duty attached to citizenship; otherwise, it could be a condition of entry into the labour force and avoidable by those choosing not to work. Basic work could act as an income guarantee providing wages sufficient for a low but adequate living standard. Those wanting higher incomes would supplement their basic work with employment. An argument for basic work could centre on its fostering a public-service, communal spirit and its reducing dependency on state benefits: like guaranteed work, it would yield genuine wage incomes recorded in the national income accounts. An obvious argument against basic work is that resembles conscripted labour and may thus appear illiberal and inefficient.

The alternatives set out in Table 1 broach wide-ranging practical and ethical issues, which go far beyond the scope of the present paper. Attention here dwells on the macroeconomic effects of the schemes within a Keynesian framework.

A Keynesian model

The following analysis uses a Keynesian model that expresses income and expenditure as functions of employment. Diagrammatically, the model mirrors the usual Keynesian cross, but with employment rather than income on the horizontal axis (see, for example, Nell, 1992, Chapter 20). Such a framework can show how various income maintenance schemes will influence national income and employment.

It is convenient to have a model embracing all four schemes in Table 1. Let M denote the income support provided to the unemployed, and V' the average productivity (value added per worker per period) of full-time guaranteed and basic work. If guaranteed and basic work operate on a non-profit-making basis with negligible overhead costs, but are taxed in the normal way, then net wage income will be $(1-t)V'$, where t is the tax rate. Suppose that guaranteed and basic work yield the same net income as the equivalent cash benefits, so that $(1-t)V' = M$. An unemployed person will receive a net disposable income of M, derived from cash benefits, government-created work, or some combination of these.

Let a ($0 < a < 1$) denote the degree of universality in social assistance schemes, such that $a = 0$ implies pure conditional measures, $a = 1$ pure unconditional measures, and $0 < a < 1$ a hybrid case. Let b ($0 < b < 1$) denote the degree to which social assistance is work-based, such that $b = 0$ implies pure cash-based measures, $b = 1$ pure work-based measures, and $0 < b < 1$ a hybrid case. The four components of social assistance will then provide net incomes as follows: unemployment benefits = $(1-a)(1-b)M$; basic income = $a(1-b)M$; guaranteed work = $(1-a)b(1-t)V' = (1-a)bM$; basic work = $ab(1-t)V' = abM$. When $0 < a < 1$ and $0 < b < 1$, guaranteed and basic work have productivities at the lower levels $(1-a)bV'$ and abV', which could mean shorter working hours at the same hourly productivity or the same working hours with lower work intensity; either way, the worker's engagement in work-based social assistance has diminished. Each unemployed person receives all four components of social assistance to give a total of M. Everyone else receives only the unconditional components (basic income and work) to give a total of aM. Varying a and b

will change the composition of social assistance, while holding constant the net income support for the unemployed.

As the universality parameter a and the work-basis parameter b can take the values zero, unity or something in between, there are nine possible social assistance schemes in the model: four pure cases and five hybrids (see Table 2). Most actual social assistance adopts the pure unemployment benefits case ($a = b = 0$) in the top left-hand corner of Table 2. The other eight cases remain largely unexplored, though they emerge quite naturally from the conceptual distinctions made above. Each case in Table 2 gives rise to a different version of the Keynesian cross, different employment and income levels, and a different mode of national income adjustment.

Table 2 Nine possibilities for social assistance

	$b = 0$	$0 < b < 1$	$b = 1$
$a = 0$	Pure ub	ub/gw	Pure gw
$0 < a < 1$	ub/bi	ub/gw/bi/bw	gw/bw
$a = 1$	Pure bi	bi/bw	Pure bw

Basic work would require that the employed carry out extra work tasks: the time and effort involved might reduce their productivity, creating a trade-off. To allow for this, suppose that the productivity of the employed varies with the basic work (abV') they undertake. Let average productivity be $V\text{-}dabV'$, where d reflects the adverse effect of the basic work ($0 < d < 1$). Adding the output from basic work gives a total productivity $V+(1\text{-}d)abV'$. If $d = 1$, then the employed have fixed total productivities V, and the output from basic work merely displaces output from employment. If $d = 0$, then there is no

displacement, and basic work provides a net addition to output. If $0 < d < 1$, as seems most likely, then there is partial but not complete displacement, so that basic work does bring a total productivity increase. By its nature, basic work must entail unskilled, low productivity tasks valued chiefly for their income maintenance role, not their output. Higher levels of V' would, all the same, help bolster national income.

In order to uphold the parallel with basic income, basic work will be assumed applicable to the whole population T, as a right or duty of citizenship. The labour force L then becomes a subset of T who have registered as seeking further employment; those unable to find jobs are entitled to guaranteed work (plus unemployment benefits). Since employment and guaranteed/basic work both yield formally recorded incomes, national income now has two components, $Y_E = (V\text{-}dabV')E$ derived from standard employment and $Y_W = abV'T+(1\text{-}a)bV'(L\text{-}E)$ derived from job creation schemes. The income side of the model is therefore:

$$(1) \qquad Y = Y_E + Y_W = bV'(aT+(1\text{-}a)L) + (V\text{-}(1\text{-}a+da)bV')E$$

Basic and guaranteed work ensure that national income cannot be less than $bV'(aT+(1\text{-}a)L)$, the minimum national income generated when E is zero. The coefficient on E is now adjusted downward below V because of the fall in guaranteed work as E expands and the negative productivity effect of basic work. Setting $b = 0$ means that work-based social assistance has been withdrawn, and the income curve reverts to its usual form $Y = VE$.

Work-based measures also alter the expenditure side of the model. Suppose that expenditure patterns from basic and guaranteed work incomes resemble those from wage incomes and cash benefits, with a common average propensity to consume (APC) of c_1. Consumption expenditures from cash benefits and guaranteed/basic work incomes can be expressed as $C_M = c_1(a(1\text{-}b)MT+(1\text{-}a)(1\text{-}b)M(L\text{-}E))$ and $C_W = c_1(1\text{-}t)(abV'T+(1\text{-}a)bV'(L\text{-}E))$. The income Y_E from standard employment is divided between wage and non-wage incomes, such that k $(0 < k < 1)$ is the non-wage share and $1\text{-}k$ the wage share. Non-wage incomes give rise to an APC of c_2, where $c_2 < c_1$. Consumption expenditures from Y_E will

be $C_E = c_3(1-t)(V-dabV')E$, where $c_3 = (1-k)c_1+kc_2$ and all incomes are taxed at the same rate t. Assuming a closed economy, total expenditure X will then be:

$$\begin{aligned} X &= C_M + C_W + C_E + I + G + J \\ &= c_1(1-t)V'(aT+(1-a)(L-E)) + c_3(1-t)(V-dabV')E + I + G + J \\ &= c_1(1-t)V'(aT+(1-a)L) + (1-t)(c_3(V-dabV')-c_1(1-a)V')E + I + G + J \end{aligned}$$

where I = investment; G = regular government spending on goods and services; $J = abV'T+(1-a)bV'(L-E)$ = government spending on job creation. Although J is motivated by income maintenance objectives, it produces real output and must be included alongside G as government spending on goods and services. In view of the unskilled, low-paid, flexible character of guaranteed and basic work, the output produced would be more expendable than the outputs from G, but would still be formal productive work, presumably with a community service aspect.

The parameters a, b, c_1, c_2, d, k, t, V and V' all remain constant during the period considered, as do relative prices. Setting $Y = X$ and solving for E and Y yields the following steady states:

$$(2) \qquad E = \frac{c_1(1-t)V'(aT+(1-a)L) + I + G}{(1-c_3(1-t))(V-dabV') + c_1(1-a)(1-t)V'}$$

$$(3) \qquad Y = \frac{(aT+(1-a)L)(b-(bc_3-c_1)(1-t))(V-dabV')V' + (V-(1-a+da)bV')\,(I+G)}{(1-c_3(1-t))(V-dabV') + c_1(1-a)(1-t)V'}$$

These general expressions simplify whenever a and b are set to unity or zero. The four pure cases in the corners of Table 2 give the following steady-state values for E and Y:

Unemployment benefits ($a = b = 0$)

$$(4) \qquad E = \frac{c_1ML + I + G}{(1\text{-}c_3(1\text{-}t))V + c_1M} \qquad Y = \frac{c_1ML + I + G}{1\text{-}c_3(1\text{-}t) + c_1M/V}$$

Basic income ($a = 1$, $b = 0$)

$$(5) \qquad E = \frac{c_1MT + I + G}{(1\text{-}c_3(1\text{-}t))V} \qquad Y = \frac{c_1MT + I + G}{1\text{-}c_3(1\text{-}t)}$$

Guaranteed work ($a = 0$, $b = 1$)

$$(6) \qquad E = \frac{c_1(1\text{-}t)V'L + I + G}{(1\text{-}c_3(1\text{-}t))V + c_1(1\text{-}t)V'} \qquad Y = \frac{(1\text{-}(c_3\text{-}c_1)(1\text{-}t))VV'L + (V\text{-}V')\,(I + G)}{(1\text{-}c_3(1\text{-}t))V + c_1(1\text{-}t)V'}$$

Basic work ($a = b = 1$)

$$(7) \qquad E = \frac{c_1(1\text{-}t)V'T + I + G}{(1\text{-}c_3(1\text{-}t))(V\text{-}dV')} \qquad Y = \frac{(1\text{-}(c_3\text{-}c_1)(1\text{-}t))V'T + I + G}{1\text{-}c_3(1\text{-}t)}$$

How do changes in social assistance policy affect employment and national income? Partially differentiating E in equation (2) with respect to a and b gives:

$$\frac{\partial E}{\partial a} = \frac{c_1(1\text{-}t)V'(T\text{-}L+E) + dbV'(1\text{-}c_3(1\text{-}t))E}{(1\text{-}c_3(1\text{-}t))(V\text{-}dabV') + c_1(1\text{-}a)(1\text{-}t)V'} > 0$$

$$\frac{\partial E}{\partial b} = \frac{daV'(1\text{-}c_3(1\text{-}t))E}{(1\text{-}c_3(1\text{-}t))(V\text{-}dabV') + c_1(1\text{-}a)(1\text{-}t)V'} \begin{cases} = 0 & \text{if } a = 0 \text{ or } d = 0 \text{ or both} \\ > 0 & \text{if } a > 0 \text{ and } d > 0 \end{cases}$$

Higher a unambiguously raises E, but higher b raises E only if a and d are both positive, in other words, only if there is an unconditional element in social assistance and an adverse productivity effect of basic work. The fall in productivity induced by basic work, which might seem unwelcome, has the desirable property of raising steady-state employment. Partially differentiating Y in equation (1) with respect to a and b gives:

$$\frac{\partial Y}{\partial a} = bV'(T-L) + (1-d)bV'E + (V-(1-a+da)bV')\frac{\partial E}{\partial a} > 0$$

$$\frac{\partial Y}{\partial b} = aV'(T-dE) + (1-a)V'(L-E) + (V-(1-a+da)bV')\frac{\partial E}{\partial b} > 0$$

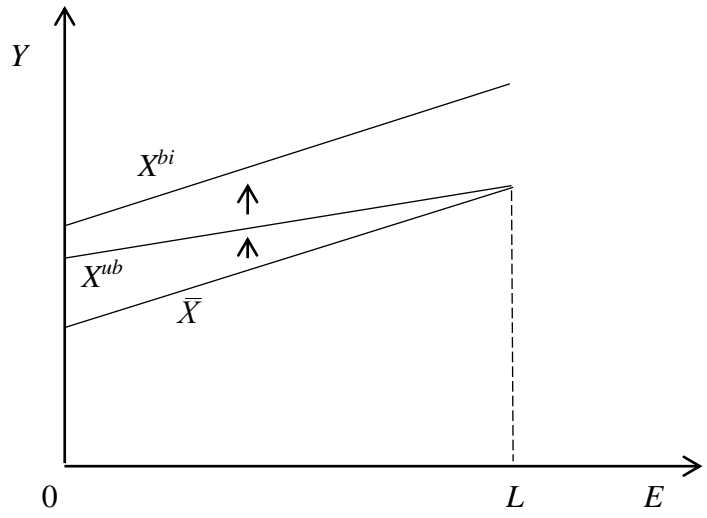
Higher a and b unambiguously raise Y for all parameter values. The effect of a on Y occurs mainly through higher aggregate demand and employment, the effect of b mainly through the output of basic and guaranteed work. Generally speaking, moving toward unconditional and work-based social assistance will stimulate both employment and national income.

Figure 1 depicts the effects of cash-based and work-based measures on the expenditure and income curves. The cash-based measures in Figure 1(a) leave the Y curve untouched (as $Y = VE$) and raise the X curve through transfer payments. $\bar{X}$ is the no-social-assistance case (intercept $I+G$; slope $c_3(1-t)V$), where the null-income group have zero expenditure. Unemployment benefits rotate $\bar{X}$ upward around the $E = L$ vertical to give X^{ub} (intercept $c_1ML+I+G$; slope $c_3(1-t)V-c_1M$). Basic income translates $\bar{X}$ upward to give X^{bi} (intercept $c_1MT+I+G$; slope $c_3(1-t)V$). Hybrid cases ($0 < a < 1$; $b = 0$ in Table 2) produce X curves lying between X^{ub} and X^{bi}.

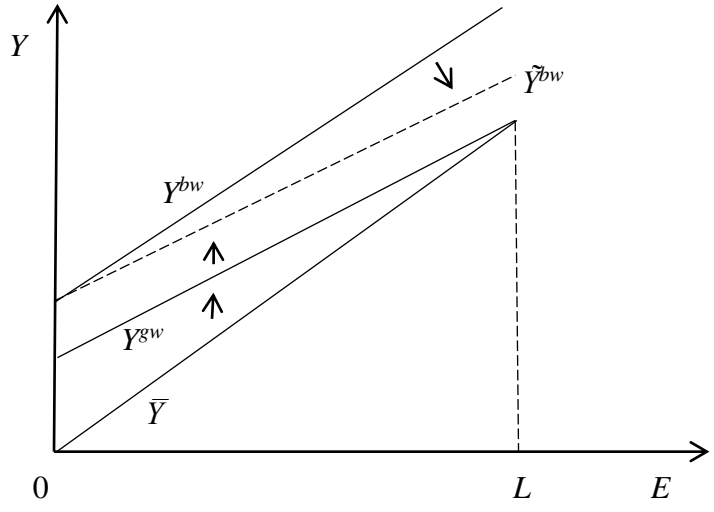
The work-based measures in Figure 1(b) match the cash-based measures in form, but shift the Y curve instead of the X curve. $\bar{Y}$ is the no social assistance case, where $Y = VE$. Guaranteed work rotates $\bar{Y}$ upward around the $E = L$ vertical, to give Y^{gw} (intercept $V'L$; slope $V-V'$). Basic work gives Y^{bw}, whose slope depends on the productivity trade-off

Figure 1 Cash-based and work-based social assistance

(a) Cash-based



(b) Work-based



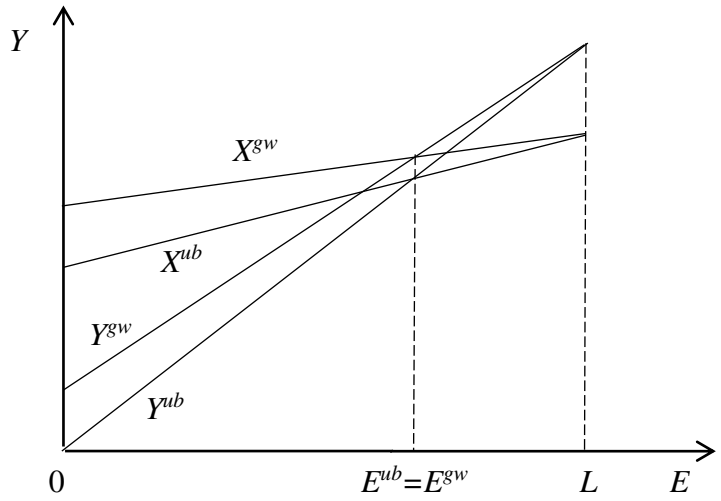
parameter d (intercept $V'T$; slope $V-dV'$). If $d = 0$, then Y^{bw} is an upward translation of $\bar{Y}$. If $d > 0$, then a curve such as $\tilde{Y}^{bw}$ will ensue, with a slope lower than that of $\bar{Y}$ but greater than or equal to that of Y^{gw}. Hybrid cases ($a = 0$; $0 < b < 1$ in Table 2) will produce Y curves lying between Y^{bw} (or $\tilde{Y}^{bw}$) and Y^{gw}. Expenditures will rise when people spend their guaranteed and basic work incomes; curves Y^{gw} and Y^{bw} will each have an associated X curve raised above the no-social-assistance case. Work-based approaches, unlike income-based ones, promote higher consumption expenditures by raising formally recorded incomes, thus moving both Y and X curves upward.

Figure 2 shows steady-state outcomes for conditional and unconditional schemes. Figure 2(a) covers conditional schemes (unemployment benefits and guaranteed work), with Y^{gw} and X^{ub} defined as before. Y^{ub} is the Y curve for the unemployment benefits case ($Y = VE$), and X^{gw} is the X curve for the guaranteed work scheme (intercept $c_1(1-t)V'L+V'L+I+G$; slope $c_3(1-t)V-c_1(1-t)V'-V'$). X^{gw} can be downward-sloping if V' is so large that the withdrawal of job creation expenditures outweighs the rise in consumption expenditures as E increases. At any given value of E, X^{gw} will exceed X^{ub}, and Y^{gw} will exceed Y^{ub}, by a common vertical distance equal to the output and public spending associated with guaranteed work. Hence, in the steady state, $E^{ub} = E^{gw}$ and $Y^{ub} < Y^{gw}$, as can be seen from equations (4) and (6).

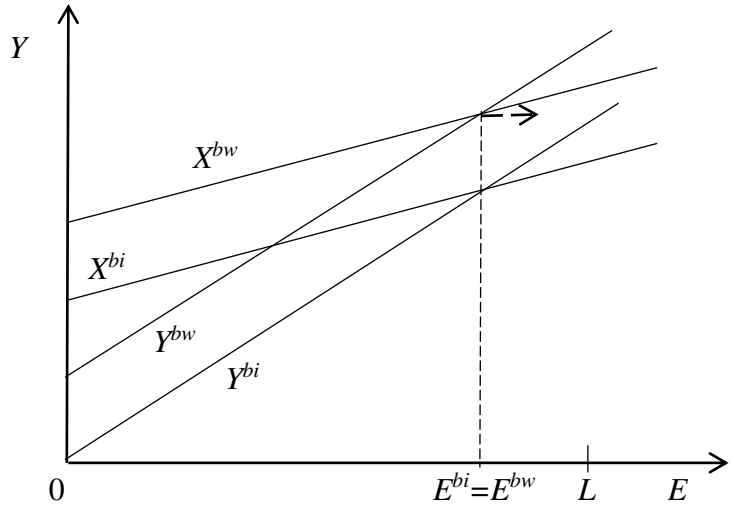
Figure 2(b) covers unconditional schemes (basic income and work), assuming no adverse productivity effects from basic work ($d = 0$). Y^{bi} is the Y curve for the basic income case ($Y = VE$), Y^{bw} and X^{bi} are defined as before, and X^{bw} is the X curve for the basic work scheme (intercept $c_1(1-t)V'T+V'T+I+G$; slope $c_3(1-t)(V-dV') = c_3(1-t)V$ when $d = 0$). As in Figure 2(a), the X and Y curves have the same vertical distance between them, which now reflects the constant output and public spending associated with basic work: X^{bw} and X^{bi} are parallel, and so are Y^{bw} and Y^{bi}. Consequently, when $d = 0$, then $E^{bi} = E^{bw}$ ($> E^{ub} = E^{gw}$) and $Y^{bi} < Y^{bw}$ because of the higher productivity from basic work. When $d > 0$, however, both the X^{bw} and Y^{bw} curves will rotate downward around their intersections with the vertical axis, and the new steady state will have higher employment than the $d = 0$ case but the same national income (see equation (7)). Lower productivity as d rises yields an exactly

Figure 2 Steady-state outcomes

(a) Conditional schemes



(b) Unconditional schemes



compensating rise in E and a constant Y; other things being equal, the steady state moves horizontally outward along the dotted arrow in Figure 2(b).

The hybrid cases when $0 < a < 1$ or $0 < b < 1$ produce intermediate outcomes between the pure cases considered above. With each case having its own Keynesian cross, the basic Keynesian arguments about aggregate demand must rely heavily on social policy measures. Of key importance is the way that the various schemes will influence stability, employment patterns, the income distribution, the government budget, and economic efficiency.

Stability

The stability of national income and employment turns on how the steady state responds to changes in investment or other autonomous expenditures. One should therefore look at the relation between the parameters a and b and the size of the income and employment multipliers.

The income multiplier n_Y can be obtained by partially differentiating Y (from equation (3)) with respect to I:

$$(8) \qquad n_Y = \frac{\partial Y}{\partial I} = \frac{V-(1-a+da)bV'}{(1-c_3(1-t))(V-dabV') + c_1(1-a)(1-t)V'}$$

The employment multiplier n_E, which relates the final change in E to the initial employment impact of a change in I, can be obtained by partially differentiating E (from equation (2)) with respect to I and then multiplying by the productivity of the jobs created through investment spending. If employment in investment-good industries has the same productivity as in other industries (V-$dabV'$), then:

$$(9) \qquad n_E = (V\text{-}dabV') \frac{\partial E}{\partial I} = \frac{V\text{-}dabV'}{(1\text{-}c_3(1\text{-}t))(V\text{-}dabV') + c_1(1\text{-}a)(1\text{-}t)V'}$$

Comparing equations (8) and (9) shows that n_Y and n_E are equal whenever $a = 1$ or $b = 0$ or both, in other words, whenever there is no guaranteed work scheme. For cases with a guaranteed work scheme, n_E will exceed n_Y: employment rises at the expense of guaranteed work and the associated income, pulling down the income multiplier but leaving the employment multiplier unchanged. Cash transfers or basic work do not incur this income loss as employment rises, and so n_Y and n_E are equal.

Both n_Y and n_E are increasing functions of a, which means that greater universality in social assistance will raise the income and employment multipliers and reduce the stability of national income and employment. Conditional measures, serving as automatic stabilisers, flatten out the X curves in Figures 1 and 2 and dampen the variability of the steady state. The vital difference from unconditional measures is that cash transfers or guaranteed work actively replace employment rather than passively supplement it: a recession calls forth social assistance as an endogenous feature of the model, whereas an expansion curtails social assistance. Governments wishing primarily to stabilise the economy might therefore favour conditional measures.

Changes in b have almost the opposite effect of changes in a: n_Y is either a decreasing function of b (when $a < 1$) or invariant with respect to b (when $a = 1$); likewise, n_E either decreases with b (when $0 < a < 1$, $d > 0$) or stays invariant (when $a = 0$ or 1 or $d = 0$). Generally speaking, a shift toward work-based social assistance will stabilise national income and employment or, at worst, leave matters unchanged. The stabilising effect on Y stems from the conditional component of social assistance, present when $a < 1$. Higher b implies a switch from unemployment benefits, which add nothing to national income, to guaranteed work, which adds formally recorded output and income. The slope of the Y^{gw} curve falls (see Figure 2(a)), and Y becomes more stable as a result. Raising b affects the employment multiplier n_E only in cases where a and d exceed zero, that is, where basic work reduces the productivity of employment. If so, then raising b will rotate the X and Y

curves downward around their intersections with the vertical axis, giving a lower employment multiplier (and a further fall in the income multiplier). On the whole, job creation schemes should stabilise national income and employment.

Employment patterns

Advocates of basic income have sometimes claimed that it would encourage a more even employment distribution (Purdy, 1988). The argument hinges on attitudes to work when everyone receives basic income as an alternative or supplement to wage incomes. People would no longer regard full-time work as their only income source and would be freer to choose the type and extent of work they undertake. Many people may today be working longer hours than they would wish, while others have no work at all; basic income could encourage shorter hours and thereby release working time for the unemployed. Such an argument invokes microeconomic factors; basic income lets people assert their work preferences and resist constraints on working hours.

Other, macroeconomic, factors may also bear on the employment distribution (Jackson, 1991-2). When social assistance is conditional ($a < 1$), employment income Y_E is an increasing function of productivity V, but when social assistance is unconditional ($a = 1$), Y_E is independent of V. Aggregate profits, expressible as $P = kY_E - F$ where F denotes fixed rental incomes, are positively related to Y_E. With conditional social assistance, employers can boost their aggregate profits by raising V and concentrating working time among a subset of the labour force. Employment will fall, E being a decreasing function of V in equation (2). Conditional social assistance, which ties government spending (and thus aggregate demand) to employment practices, creates collective incentives for employers to maintain a skewed employment distribution. The outcome will be socially divisive: profit recipients and the job-secure will gain higher incomes, others will lose their jobs. Unconditional social assistance, however, leaves Y_E and P invariant with respect to V and removes the incentive to concentrate employment. Basic income and work would

encourage shorter working hours, lower work intensity and higher employment than would prevail under conditional social assistance. Whether these macroeconomic incentives have great practical significance is perhaps doubtful, given that individual employers may be unaware of the collective interests involved. But the harmony between employers' (macro) and workers (micro) incentives suggests that unconditional income maintenance should foster a more even employment distribution.

Guaranteed and basic work would change employment patterns in one immediate respect, for they would constitute a new economic sector distinct from other employment. This might have unpalatable results: people in state-sponsored jobs could find themselves relegated to a lower social status, akin to the current status of the long-term unemployed. Such divisions are typical of economies with skewed employment distributions and chronic inequality. Work-based social assistance could at least ensure that everyone produces real output, appears in the national income accounts and pays direct taxes. Some people would have low productivities, but no social group would be sidelined as an idle underclass wholly dependent on other people's tax payments. Unlike 'workfare' schemes, where the unemployed work for welfare benefits, a right to work would offer genuine work, albeit in low-productivity jobs designed specifically as income maintenance. Basic work could spread the low-productivity state-sponsored jobs over the whole population and further reduce the distinctions among social groups.

Although work-based income maintenance would blur existing social distinctions, the two-tier employment pattern might set up a division between 'real' jobs derived from spontaneous consumer demand and 'artificial' jobs created by the state for purposes of social assistance. Since the 'real' jobs would be mostly in the private sector and the 'artificial' jobs in the public sector, the division could spill over into a broader private/public split assigning lower status to public activities. Job-creation schemes run the risk of lowering the standing of the public sector as it becomes linked with low-productivity, low-paid activities (Davidson and Davidson, 1996, pp. 128-130). Keynesian economists, wary of job-creation programmes, have often preferred a less direct approach based on sustaining aggregate demand. This would not provide a statutory right to work, but it

would avoid the cleavage between 'real' and 'artificial' jobs and buttress the status of the public sector. A Keynesian full-employment policy is a special case of the present model, where $a = 0$, $b = 1$, and $V = V'$, so that $Y = VL$ (from equation (3)): the distinction between employment and guaranteed work vanishes, and the government simply makes sure that its regular spending on goods and services is enough to give full employment. The policies discussed here, however, presuppose that unemployment will persist. To protect the image of its regular activities, a government involved in job creation would have to stress the difference between regular public-sector employment and work-based social assistance.

One way to raise the status of guaranteed and basic work, as well as to improve their effectiveness as income maintenance schemes, would be to maximise their productivity V' and minimise the gap between V' and V. At first sight, it might seem that raising V' would damage overall productivity if $d > 0$ and basic work displaces standard employment. For economies below full employment, this is not the case; E and Y in equations (2) and (3) are increasing functions of V', whatever the value of d. Higher V' will elicit a rise in employment sufficient to outweigh any productivity losses. As V' rises (and $V\text{-}dabV'$ falls), the employment distribution will become more equal. There will be higher employment, but each employed person will have lower productivity (that is, shorter working hours or lower work intensity). Raising the productivity of guaranteed and basic work can reduce work disparities directly, by narrowing the $V\text{-}V'$ gap, and indirectly, by diminishing the skewness of the employment distribution. The income and employment multipliers in equations (8) and (9) are decreasing functions of V'. Besides expanding output, higher productivity in guaranteed and basic work will also stabilise the economy.

Basic work has a paradoxical relationship with employment. It seems intuitive that a stronger displacement effect, with a higher value of d, should create a trade-off between basic work and employment. For each individual worker this may be true, but it does not extend to the whole economy. Equation (2) shows that higher levels of d will raise steady-state employment: the worse the impact of basic work on productivity, the higher the number of standard jobs created. The displacement effect of basic work may well bring benefits insofar as it evens out the employment distribution. Higher d will also narrow the

gap between V' and $V\text{-}dabV'$, improving the relative position of basic work. Such benefits might be acquired at a cost, because Y in equation (3) is a decreasing function of d whenever basic work exists alongside guaranteed work ($0 < a < 1$, $b > 0$). If, however, basic work is the only work-based social assistance ($a = 1$, $b > 0$), then Y becomes independent of d: as d rises, the increased employment exactly offsets the reduced productivity (as shown in Figure 2(b)). What seems an obviously detrimental fall in productivity will raise employment and even out the employment distribution without reducing national income.

Income distribution

Cash benefits transfer purchasing power from taxpayers to benefit recipients. According to the national accounts, this does not redistribute incomes, as real economic activity remains unchanged, though it does rearrange expenditures. The only true income redistribution will arise in a roundabout fashion, from basic income schemes. If basic income brings a more even employment distribution as average working hours decline, then the income distribution too will become more even.

Work-based social assistance, by contrast, adds a new component Y_W to national income, through the incomes generated from guaranteed and basic work. People previously in the null-income group now have recorded incomes and enter the income distribution. Income will be equalised by raising incomes at the bottom end of the distribution, rather than by straight reallocation. As with cash benefits, there may be some effects on the income distribution if employment patterns change, and again the unconditional approach (basic work) should have a more egalitarian impact than the conditional one (guaranteed work). Of the four income maintenance schemes in Table 1, basic work should do the most to equalise personal incomes, and unemployment benefits the least.

Further redistribution may occur between wages and profit. Social assistance, in softening the blow of unemployment, should improve workers' bargaining power. All income maintenance schemes, compared with the *laissez-faire* alternative, will consolidate real wages and protect the wage share in national income. Unconditional schemes are generally assumed to provide a stronger bargaining position for workers than conditional schemes (Groot and Peeters, 1997). Unemployment benefits and guaranteed work are available only to members of the labour force, on the understanding that they are seeking and will accept employment; the authorities may urge them to take any low-paid jobs. Basic income or work, on the other hand, is unconnected with membership of the labour force and does not imply that recipients ought to be employed. Workers can be choosier about jobs; since they will always receive income maintenance, they have greater freedom to opt for shorter working hours, lower work intensity and higher real wages. In the present model, basic income or work should raise the wage share in employment incomes, 1-k, and reduce the non-wage share, k. As is usually true within a Keynesian/Kaleckian framework, a fall in the non-wage share raises national income and employment, because the APC from wage income exceeds that from non-wage income: in equations (2) and (3), E and Y are increasing functions of c_3 and decreasing functions of k. Unconditional social assistance should benefit workers through both higher employment, other things being equal, and higher real wages.

A possible counterargument is that social assistance for workers will act as a wage subsidy, allowing employers to cut wages (Brosnan and Wilkinson, 1988; Iacobacci and Seccareccia, 1989; Seccareccia, 1991). This sceptical view normally pertains to a minimum guaranteed income, where cash benefits make up the difference between low-wage incomes and a minimum socially acceptable income level. Low-paid workers then have little reason to bargain for improved wages, as a fall in cash benefits will nullify any wage rise. With basic income, however, social assistance is not linked with the wage rate and should not impair workers' bargaining incentives. People who receive basic income may choose to work shorter hours and earn lower total employment incomes, but they still have the incentive to maximise their hourly wage rate and, thus, the wage share in national income.

Benefits for workers often mean costs for employers, and a fall in the non-wage income share would prompt employers to oppose unconditional schemes (although the rise in Y_E as k falls will cushion the effect of lower k on aggregate profits $P = kY_E - F$). Employers will gain most from social assistance contingent on their own employment decisions, which gives them extra leverage over workers and binds public spending to their recruitment and work practices. They will also gain from cash-based measures, since work-based social assistance operating on a non-profit-making basis could remove avenues for profitable private-sector activity. This assumes that job creation programmes stand apart from the private sector and do not generate private profit. Employers will be more sympathetic to job creation measures the bigger the profit share in Y_W. The ideal case for employers would be a privatised 'workfare' system (or equivalent 'training' or 'work experience' schemes) where the unemployed work in the private sector for transfer payments and produce a marketed output the generates pure profit income. The profit share in Y_W would then be unity and the unemployed would be providing free services to their 'employers'. One would hope that employer influence over social assistance would never go as far as to capture the job creation programme and exploit it as a source of cheap, publicly subsidised labour.

The government budget

Arguments against basic income frequently point out its high cost, which may cause various problems, such as the difficulty of getting electoral support for high taxes, the possibility of work disincentives, and the supposed adverse effects of larger budget deficits. Given these concerns, it is worth looking at the government budget within the present model.

The tax rate t has been held constant for all income maintenance schemes. Government revenue can be expressed as $R = tY = tY_E + tY_W$, and government spending as $S = G + J + B$

$= G + Y_W + B$, where $B = a(1\text{-}b)MT+(1\text{-}a)(1\text{-}b)M(L\text{-}E)$ = total spending on cash benefits. Under the assumption that $M = (1\text{-}t)V'$, the budget deficit will be:

$$D = S - R = G + (1\text{-}t)Y_W + B - tY_E \tag{10}$$

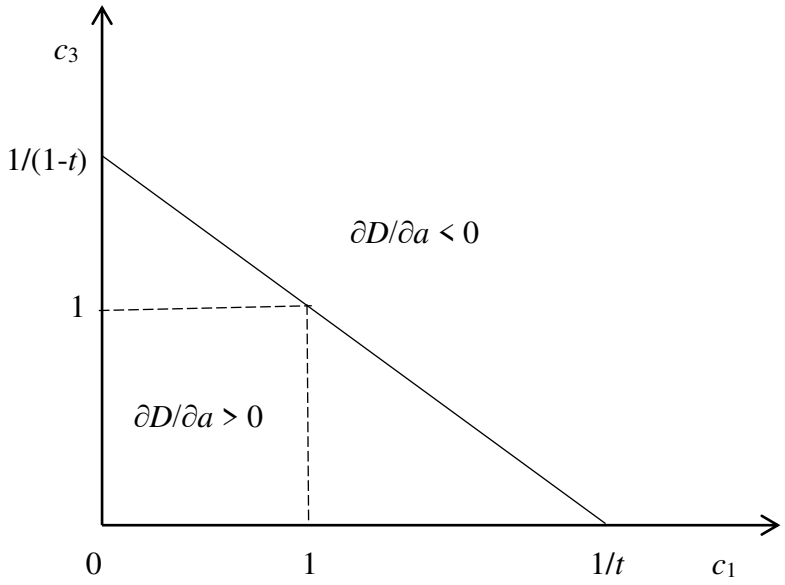
$$= aMT + (1\text{-}a)M(L\text{-}E) + G - t(V\text{-}dabV')E$$

Interest here focuses on how D varies with changes in a and b.

Intuitively, for a constant tax rate, one would expect unconditional measures to produce higher budget deficits than conditional ones, although the higher employment with unconditional measures might offset this. Partially differentiating D with respect to a, one can show that $\partial D/\partial a \geq 0$ as $1\text{-}(1\text{-}t)c_3\text{-}tc_1 \geq 0$ (see Figure 3). Under normal parameter values, where c_1, c_2, c_3 and t fall between zero and unity, the deficit will be an increasing function of a, as expected. An exception arises if $c_1 = c_2 = c_3 = 1$, in which case $\partial D/\partial a = 0$ and the government has a constant budget surplus of I. Conceivably, when c_1 or c_2 exceeds unity and is sufficiently large, a rise in a could reduce the budget deficit: the revenue gain from higher employment would then outweigh the greater cost of unconditional measures. This seems unlikely in practice, but high APC values will lessen the budgetary impact of basic income and work. The greater employment and tax revenues from unconditional schemes will always counteract the costs of the generous social assistance on offer.

Increasing b, a shift toward work-based social assistance, will either reduce the deficit or leave it unchanged. Partially differentiating D with respect to b, one finds that $\partial D/\partial b < 0$ if $0 < a < 1$, $d > 0$ and $1\text{-}(1\text{-}t)c_3\text{-}tc_1 > 0$. A movement toward work-based social assistance will reduce the budget deficit whenever basic work coexists with guaranteed work and has a negative productivity effect. In other cases, the budget deficit will stay the same.

Figure 3 Conditional social assistance and the budget deficit



Since income and expenditure are endogenous, the budget deficit varies systematically with employment. Higher employment raises revenue, reduces conditional expenditures and narrows the budget deficit until at some point the budget will balance. Setting $R = S$ in the model gives the balanced-budget employment level:

$$E^* = \frac{(aT+(1-a)L)(1-t)V' + G}{t(V-dabV') + (1-a)(1-t)V'}$$

Employment above E^* yields a budget surplus, employment below E^* a deficit. Raising a and shifting to unconditional measures unambiguously raises E^* and causes budgetary balance to occur at higher employment levels. Raising b and shifting to work-based measures has no effect on E^* when a or d is zero but otherwise raises E^*. The highest values of E^* therefore derive from unconditional, work-based social assistance.

Other things being equal, conditional schemes give budgetary balance at lower employment and national income levels than unconditional schemes. If the government espouses budgetary balance as a policy objective, then it may be less willing to pursue full employment when social assistance is conditional. A conditional social assistance budget can never, on its own, balance at full employment: spending drops to zero when $E = L$, while revenue stays positive, and the budget must be in surplus. Unconditional social assistance, which severs the link between public spending and unemployment, can be designed so that it breaks even at or near full employment. Balanced-budget policies should then be less deflationary and produce higher employment and national incomes. From a Keynesian angle, of course, the rationale of budgetary balance is dubious; policy should really be aiming for other, more important objectives. Nonetheless, budgetary balance animates a good deal of public policy, and in this climate the detaching of social assistance spending from employment might produce less deflationary policy stances.

Efficiency

Unconditional social assistance schemes can easily be portrayed as reducing work incentives, distorting labour markets and causing inefficiency. The same goes for work-based schemes: work organised as job creation by the state falls outside the usual run of labour markets and lacks the profit incentive of private-sector employment. Tasks performed through job creation programmes might, it would seem, be better performed through standard employment organised on competitive principles.

The idea that unconditional and work-based social assistance are inefficient emerges from comparisons with a hypothetical competitive economy in which markets possess the efficiency properties predicted by neoclassical welfare economics. This somewhat misses the point of social assistance measures intended for economies with chronic unemployment. The goal is not to supplant or interfere with employment, but to offset unemployment in an economy operating more or less permanently below full capacity. Paying cash benefits will

enhance macroeconomic efficiency if it upholds aggregate demand and raises employment. Job creation will enhance macroeconomic efficiency if it allows people to raise their productivity above zero and earn genuine incomes. Social assistance should not threaten or dislodge current employment practices, but fill the holes resulting from unemployment. Macroeconomic slackness, allied with microeconomic tightness, is the hallmark of modern capitalist economies, as distinct from alternative economic systems (Nell, 1991). Chronic unemployment engenders the need for social assistance, together with the space for public intervention to improve macroeconomic efficiency.

By efficiency criteria, work-based social assistance schemes seem better than cash-based ones, because they yield higher employment and national income, all else being equal. They are seldom favoured by economists, though, and are adopted only with reluctance. Traditionally, the United States has resorted to job creation programmes more often than, say, the United Kingdom, but this follows more from the American ethos of self-reliance than from any faith in state intervention (Ashton, 1986). The basic problem facing job creation programmes is that they contravene the operating mode of capitalist economies, where demand is scarce and employers provide jobs to meet demand, not as a right or duty. An employment guarantee would reverse the usual ordering of things – it manipulates demand to the requirements of workers, not workers to the requirements of demand. Job creation goes against the grain of capitalist economies whose 'flexibility' depends on scarce demand and chronic unemployment.

Work-based social assistance reflects an inconsistency in the government's outlook. If the authorities are worried about unemployment and willing to create jobs to alleviate it, then why did they let it arise in the first place? Why did they not ensure that aggregate demand was sufficient to get the economy at or near full employment? The prevalence of unemployment betokens a casual attitude toward macroeconomic efficiency. Employers will be more concerned with microeconomic matters such as their profit rates and bargaining power over workers. Governments may be nominally striving for full employment but in practice swayed by free-market doctrines and the sectional interests of employers. As Kalecki (1943) observed, the deflationary stance of employers will

normally keep the economy below full capacity, even when the government pays lip service to Keynesian economics. The social assistance policy most congenial to employers will be subsistence-level unemployment benefits, which minimise public intervention, tie social assistance to employment and produce the lowest employment rate. Although other methods might seem superior on grounds of macroeconomic efficiency, they are liable to remain only hypothetical cases.

Conclusion

Keynesian economics demonstrates that demand management could minimise the size of the null-income group in capitalist economies and curb the need for social assistance. Policy reforms such as basic income schemes or job creation programmes should not therefore be viewed as replacements for demand management. Ideally, in a country where successful demand management ensures a high and stable employment rate, social assistance measures would be dealing with limited poverty affecting a small subset of the population.

Even so, it is still desirable to choose measures that will sustain output and reduce inequality. A Keynesian perspective on social assistance can highlight macroeconomic properties omitted from neoclassical analyses. Radical reforms of social assistance would have some attractive macroeconomic features: work-based measures would raise output and employment, and unconditional measures would encourage a more even income distribution. Such policies, as a supplement to demand management, could raise the economy's macroeconomic efficiency, redistribute employment and prevent excessive income disparities.

Whatever their advantages, radical reforms of social assistance would face obstacles from employers wanting to enlarge profits and maintain control over workers. Employer interests will steer social assistance policy toward the least expansionary and least

redistributive of the various possibilities, namely conditional cash benefits paid at subsistence level. Arguments for higher benefits, unconditional measures or a right to work will meet strong political and institutional barriers – the same barriers that have blocked the use of Keynesian policies in recent years.

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