

**REDUCING POVERTY WHILE INCREASING EMPLOYMENT:
A PRIMER ON ALTERNATIVE STRATEGIES. AND A BLUEPRINT**

Robert Haveman

TABLE OF CONTENTS

Introduction	8
The Policy Setting	8
Alternative policy strategies designed to increase employment and reduce the povertytrap	11
Four income support strategies	12
Two labour market strategies	14
The six policy strategies: analytics and assessment	15
The credit income tax	16
The negative income tax	20
The basic income guarantee	23
Earnings supplement (ES) or earned income tax credit (EITC) plans	25
A wage rate subsidy: objectives, impacts, and issues	27
An employer-based marginal employment subsidy: objectives, impacts, and issues	28
Employment-centred social policy: a stylised reform strategy	29
A prototypical growth-with-equity strategy	30
A Final note on the dilemma of some OECD countries	35
Bibliography	41

The author is John Bascom Professor of Economics and Public Affairs at the University of Wisconsin-Madison United States He acknowledges the comments of John P Martin on earlier versions of this paper The helpful suggestions of Michael P Fetner Martine Durand and Hannes Suppanz are also appreciated

INTRODUCTION

Policy measures designed to reduce poverty have often foundered on the issue of work incentives. The potential conflict between these two objectives is a manifestation of the traditional conflict between equity and efficiency: the redistribution of income from higher- to lower-income people typically leads to reduced incentives for both groups to supply labour to the market or to exercise initiative. This conflict is also known as the “unemployment trap” or the “poverty trap” – with income transfer (welfare) programmes in place, those with low earned income have a reduced incentive to seek and accept employment (or to increase work effort, if employed), and as a result have high non-employment and/or poverty rates.

In this paper, I discuss several policy strategies for reducing poverty while maintaining work incentives. These strategies are discussed in a context in which a system of income support policies and labour market initiatives already exists. Existing policies – especially income transfer measures – typically have two characteristics: they are categorical and piecemeal in their coverage, and they contain serious work disincentives. The policy strategies that I focus on are designed both to increase the comprehensiveness and uniformity of programme coverage and to improve the structure of work incentives.

First, I describe in general terms the policy setting in which the discussion of the alternative strategies is nested. The following section identifies and defines policy strategies that will be emphasised. The analytics of prototypical plans are then presented and the primary pros and cons of each are assessed, with (in those cases for which empirical estimates exist) a discussion of their cost and labour supply implications. The final section presents a blueprint for a policy programme that is composed of the strategies that have been discussed in previous sections. This stylised programme is designed to mitigate some of the negative economic effects of the existing structure of welfare state and labour market policies in several OECD countries. A conclusion addresses the nature of the dilemma facing the major OECD countries.

THE POLICY SETTING

Among the larger and more industrialised OECD economies, a large and financially costly social welfare system is in place. While the details of these systems

differ over the countries, the following characteristics tend to be common to all or nearly all of them ¹

- An **unemployment benefit programme** seeks to replace earnings losses due to the involuntary separation of a worker from a job. These programmes tend to replace a substantial proportion of the earnings losses – from 30 to 80 per cent – among the OECD countries. Moreover, in many countries unemployment benefits can be received for a long period of time, often a year or more. In some of the countries, the expiration of unemployment benefit eligibility triggers eligibility for an alternative benefit programme, such as disability benefits.
- A **disability benefits programme** provides earnings replacement to workers who become handicapped during their working years, either on or off the job. These programmes again replace a substantial proportion of the lost earnings. Receipt of benefits is typically of long duration.
- **Provision for early retirement** from the work force is available in most of the countries, which provision is often a transition from the receipt of unemployment or disability benefits to the receipt of retirement pensions. The replacement of earnings in early retirement schemes is typically less than if retirement is delayed until the normal retirement age, but in several countries the replacement rate extends up to 70 per cent after age 60.
- All of the countries have in place a **safety net welfare system** that provides coverage to working-age individuals and families headed by such individuals. Benefit levels in these programmes range widely across the countries, and in some cases vary significantly across various regions within a country. Many OECD countries have welfare programme benefit levels that assure recipients of an income level around one-third to one-half of the median income level in the country.
- Many of the countries have a legal **minimum wage policy** that requires employers to pay a minimum wage rate (or a minimum weekly wage for full-time workers) to employees irrespective of their education, skill, training, or productivity. This policy typically applies to all workers, including school leavers without work experience and recipients of unemployment and disability benefits should they decide to return to work. Other countries achieve an effective minimum wage arrangement through more or less comprehensive collective bargaining agreements. In a few countries, some groups of workers are not covered by minimum wage laws, in others (e.g. the Netherlands) wages below the minimum are permitted for some groups of workers (e.g. young workers).
- Many of the countries have **employment regulations** that constrain the ability of employers to alter the size of their work force in response to

changes in the demand for their output, hence, an employment contract becomes a fixed cost to the employer, generating caution in the addition of permanent workers to the enterprise. Such regulations also lead to disguised unemployment in periods or places of slack demand, as employers are constrained from releasing workers, even if there is insufficient demand to retain them.

The constellation of policies with this set of characteristics has both positive and negative economic impacts. These programmes form a more or less comprehensive social safety net. As a result, income poverty is reduced and the disparity between high and low income families that results from the unfettered operation of labour markets is moderated. In the process, workers are protected from severe income losses due to illness, disability, unemployment, and retirement, and home-makers experiencing divorce or childbearing out of marriage have their incomes and those of their children supported. The security against adverse events that these policies afford is of value to both those who are directly protected by them, and to others on whom burdens would fall were it not for this protection. Moreover, many of these programmes provide employment protection which fosters long-term employer-employee relationships and the training-productivity benefits that are inherent in such relationships. Similarly, the provision of income support during periods of short-term unemployment may foster job search and efficient employment matches.

However, these policies can also have distinctly negative effects on economic performance to the extent that they

- reduce the demand for labour (especially low-wage, low-skilled labour), and encourage the substitution of temporary employees for permanent workers. The latter effect reduces the level of job training offered by firms to employees, and erodes the benefits from establishing long-term employer-employee relationships,
- reduce the willingness to work, and the incentive to engage in job search, for those who are recipients of income support benefits which may be available for a long duration, e.g. unemployment and disability benefits,
- increase the costs of enterprises that are required to pay taxes to cover the costs of the benefits or higher-than-market wages, for the open economies that characterise many of the OECD countries, these costs reduce the demand from foreign markets for the goods and services produced,
- create rigidities in the labour market, keeping wage rates from equilibrating and labour demand from expanding to its true potential,
- erode the incentive for diligence and effort for current job holders, as the possibility of job loss is reduced by employment regulations, and the alter-

native available income support from public transfer programmes provides income protection in the face of job loss

These negative economic effects are viewed by many as prejudicing the rate of productivity growth, inhibiting employment growth, increasing joblessness of low-wage, low-experience, and low-skilled workers,* reducing the rate of economic growth, and creating a low-income or unemployment trap for many individuals and families who receive income support benefits. It is into this context that analysts, advocates, and policy-makers propose reforms of welfare state policies designed to overcome unemployment and poverty traps.

ALTERNATIVE POLICY STRATEGIES DESIGNED TO INCREASE EMPLOYMENT AND REDUCE THE POVERTY TRAP

The basic message that many observers take from the constellation of social policy measures now in place in most OECD countries (as characterised in the section on “the policy setting”, above) is that such systems are both economically and administratively inefficient. Work disincentives leading to “poverty traps” are one of the central concerns. The benefits of these, often cumulative, programmes may provide higher incomes to recipients than equivalent low-skilled workers are able to earn if working full time, year round. Moreover, the combination of these policies may entail such steep benefit reduction rates as to make the substitution of work and earnings for benefits unattractive to recipients (see, for example, *OECD* (1994), Chapter 9).

The presence of numerous programmes, often with overlapping target groups of potential beneficiaries, is also an issue. Programme eligibility rules and income determination provisions may differ among programmes, and different administrative offices and procedures must be encountered in order to secure assistance. This lack of programme integration is seen as costly, and as presenting obstacles to support for people eligible for benefits.

Finally, these programmes are viewed as doing little to stimulate the growth of employment, either by way of encouraging employers to expand their total work force (across the skill distribution), or to expand their hiring of low-skilled workers through the substitution of low- for higher-skilled labour or for capital. The costs and the means of financing the programmes are often viewed as a major impediment to employment expansion in both of these dimensions. Many of these programmes require employer contributions (or payroll taxes) that increase the effective cost of adding or retaining workers. Often these increased labour costs are higher for regular, full-time contract employees than for temporary or “contracted out” workers, and this too is viewed as impeding the movement from benefit-recipient status to work and employment.

These concerns prompt a basic question

Is there not another way of organising social policies targeted on workers and families with low earnings capacities that could avoid many of these problems? Is there not a more efficient way of allocating sizeable public expenditures so as to simultaneously encourage employment and earnings, reduce the dependence on income transfers, and erode the poverty trap?

The answer to this question is probably “Yes”, but the route from this answer to a concrete approach is not simple. Because each OECD country begins this reappraisal from a different initial situation – in terms of per capita income, the size and structure of social policy programmes already in place, the balance between efficiency and equity goals, and expected economic performance – policy change is unlikely to be uniform across countries and systems. To start down the reform path, however, requires one to consider adoption of some base or “foundation” type of income support measure. With this in place, any additional income support or labour market programmes no longer need to consider provision of “basic needs” as one of their objectives, and they can concentrate on providing special supplementation to those with special needs.

Several base or foundation arrangements have been suggested, and in the remainder of this paper many of the issues and considerations relevant to a selection of them will be explored. Before doing this, however, a brief catalogue of the possibilities will be laid out so that the overall approach and character of each can be seen. Four of these approaches are commonly thought of as “income support” or “income transfer” strategies, and they include the Credit Income Tax (CIT), the Negative Income Tax (NIT), the Basic Income Guarantee (BIG), and Earned Income Tax Credit (EITC) or Earnings Supplement (ES) plans. These measures encompass the main options for maintaining incomes, and (in some cases) seeking to minimize the labour supply disincentives inherent in any income support policy. In addition, there are two general measures that focus on the labour market – one on workers, the other on employers – rather than family units, and both of these have the goal of directly encouraging the expansion of work and earnings of low-wage workers. In each case, the policy proposed would substitute for some or all of the existing programmes in place. In the section on “employment-centred social policy a stylised reform strategy”, a constellation of these policy approaches is combined with reductions in (or elimination of) existing benefit programmes to form a stylised blueprint for reform.

Four income support strategies

The credit income tax (CIT)

This programme³ would work as follows: Each person in a country would annually be credited with a grant (or refundable credit) which would be set at some

minimum level of living. Presumably, the level of the grant would be greater for adults than for children. This grant would replace the provisions for personal exemptions (or other devices designed to eliminate the positive taxation of very low-income people). Then, all earnings and other income would be taxed at the marginal tax rate structure built into the tax system. Hence, if the family's tax liability exceeds its grant, it would pay taxes; if not, the family would receive a net transfer. A credit income tax could be substituted for a wide variety of existing welfare and income support programmes in most OECD countries. It is a fully integrated and universal tax and transfer system in its own right, and would substitute for both existing income support programmes and the existing structure of the personal income tax.

The negative income tax (NIT)

In principal, a negative income tax is very similar to a credit income tax. However, were a negative income tax enacted, the existing income tax structure need not be drastically altered, indeed, no alteration at all may be required. Like a credit income tax, a negative income tax would assure each family and individual a basic benefit related to the size of the living unit, would reduce the amount of the transfer benefit as the income of the living unit increases, and would have a break-even income level beyond which the unit would become a net taxpayer. Because the negative income tax is divorced from the normal income tax system, low-income individuals would be subject to the provisions of both systems. Like a credit income tax, a negative income tax would be a means for consolidating all income support programmes targeted at the poor into a single programme.

The basic income guarantee (BIG)

In basic income guarantee schemes, each person would receive a basic benefit (or refundable tax credit) which is unrelated to any other source of income⁴. The transfer benefits provided under the scheme could be either taxable (and, hence, partially "clawed back") or not taxable by the income tax system of the country. Introduction of a BIG benefit would be accompanied by the abolition of tax allowances and either the phasing out of a number of other income support programmes or the scaling down of the benefits provided in these programmes.

An earned income tax credit (EITC) or earnings supplement (ES)

An earnings supplement is similar to a negative income tax, except that there is no basic income guarantee that would be received by a family or individual were there no (or a very low level of) other income. Instead, the worker (or the workers in a family unit) is paid a percentage of his/her earnings as a supplement, up to some

specified level of earnings. While the previous income supplement options each have a marginal tax rate applied to income provision, the earnings supplement has a marginal *supplement* rate for those whose earnings lie below the specified earnings level, hence providing positive incentives for increased labour supply and work effort. Because it is not possible (or desirable) to supplement the earnings of all workers, the supplement paid is reduced at earnings levels above some level (known as the "kink point") through the application of an implicit marginal tax rate imposed on earnings increases above this level.⁵ Relative to a negative income tax or a credit income tax, an earnings supplement provides no benefit or transfer to those who are not employed.

Two labour market strategies

A wage rate subsidy

Like an earnings supplement, a wage rate subsidy is a work-conditioned income support programme. A wage rate subsidy programme rests on the establishment of a target wage rate which is socially determined. For any worker earning a wage rate below the target amount, a per hour subsidy is paid equal to some percentage (the subsidy rate) of the difference between the target wage rate and the actual wage rate. For example, if the target wage rate were set at \$8.00 per hour while the subsidy rate was 0.5, a worker earning \$5.00 per hour would receive a subsidy of \$1.50 per hour worked (\$1.50 is 0.5 of the difference between the target wage rate of \$8.00 per hour and the actual \$5.00 per hour wage). The "take-home" wage rate of that person would then be \$6.50 per hour. Like the earnings supplement, a wage rate subsidy cannot be a substitute for existing programmes designed to place a safety net under family income; it supplements earnings for those who work, but it does not provide income to non-workers.

Employer-based marginal employment subsidies

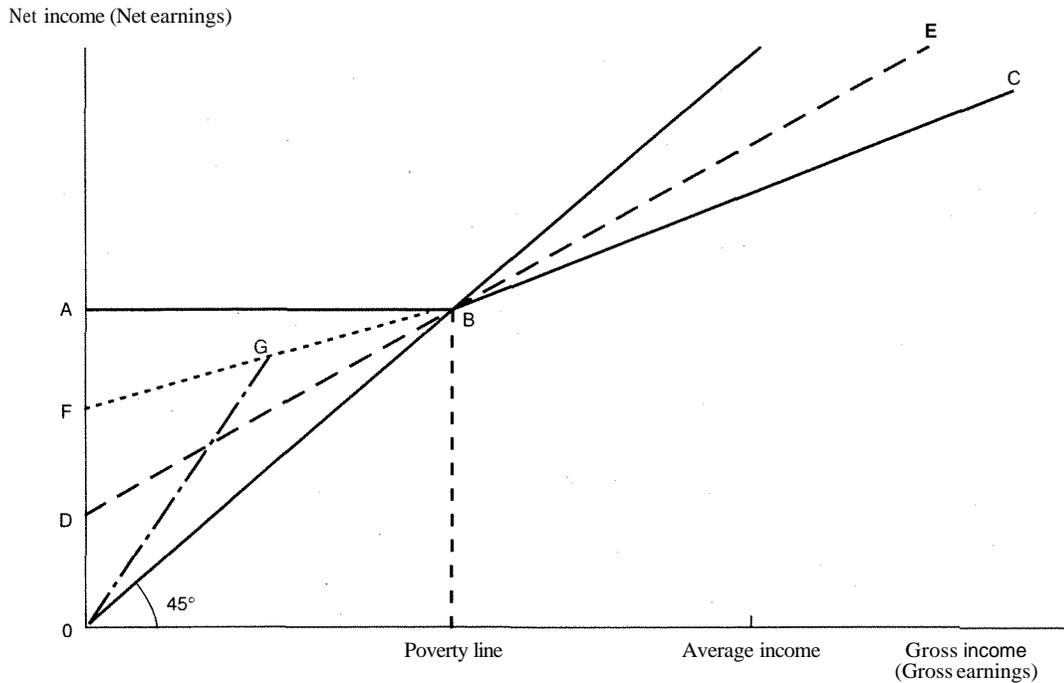
An employer-based employment subsidy – like a wage rate subsidy – is designed to increase the contribution of employment and earnings to the economic support of individual workers and their families. While the wage rate subsidy operates on low-skilled labour suppliers – increasing the attractiveness of working relative to its alternatives – employment subsidies offered to enterprises operate on the demand side of the market. To be effective, such supplements must affect the decisions of employers regarding how much labour and capital to purchase, the subsidies must be marginal in nature. One possible form of marginal employment subsidy targeted on enterprises might work as follows: the Government would provide a tax credit (or other financial subsidy) to any enterprise equal to (say) 50 per cent of the first (say) \$10 000 of wages paid to the (say) 50 workers hired in a firm above (say) 102 per cent of the firm's previous year's employment.⁶ While this

arrangement does not distinguish among workers by their unemployment or poverty status, the subsidy (and hence the incentive to hire workers) is a higher percentage of the wages of low-skilled than it is for more skilled workers. By attempting to directly expand the demand for the services of low-wage workers, this form of employment subsidy seeks to reduce poverty and unemployment by directly changing the structure of the labour market. Hence, like the wage rate subsidy, this programme would not achieve a basic income floor for families that cannot be supported by a worker.

THE SIX POLICY STRATEGIES: ANALYTICS AND ASSESSMENT

In this section, the characteristics of each of the six policy strategies outlined in the previous section are described in more detail, and an assessment of the advantages and disadvantages of each is presented. In addition the overall labour supply and cost implications of the schemes is described for those programmes on which empirical estimates of costs, benefits, and effects are available. The analytical characteristics of the four income support strategies – the credit income tax, the basic income guarantee, the negative income tax, and the earned income tax credit or earnings supplement – are described with the help of Figure 1, which presents a diagrammatic description of the benefit structure of each.

Figure 1.



The credit income tax

Structural characteristics

The basic benefit structure of a CIT programme could, in principal, be described by any of the patterns traced out by line segments ABC, DBE, FGBC, or FBE in Figure 1. The following discussion will refer to DBE as an example. At zero income or earnings, a social minimum (or poverty line) income is guaranteed through refundable credits in the personal income tax. (This basic income minimum, as we will see, also characterises an NIT or a BIG programme.) These refundable credits are paid to individual adults (and in some variants, to children, remitted to the children's guardian). All income or earnings received are taxed at the relevant marginal tax rate, which is a part of the income tax structure (set to raise sufficient revenue for government operations net of the payments for the refundable credit). Income would be defined as whatever is in the tax base, and consequently the break-even level of income (that income level at which an individual or a family would pay no net tax nor receive any of the grant) would be equal to the basic income grant divided by the marginal tax rate.⁷ A key characteristic of a CIT is that it is a **universal** programme, with refundable credits available to all households regardless of aggregate income.

The tax credit award in a CIT may or may not be included in the tax base, but most discussions assume that it is not. Hence, the tax schedule is applied to other forms of income included in the tax base. If the tax credit is not itself subject to the income tax rate schedule, the CIT structure would appear as DBE in the figure. In most discussions, a constant marginal tax rate is applied to all income in the taxable base. This characteristic distinguishes the CIT from the other programmes, which typically have different (usually higher) marginal rates on lower income families than on higher income families.

The linear shape of DBE gives this form of CIT the name "flat-rate tax", which is often used in discussions of tax or tax-transfer reform. It should be noted, however, that a CIT need not incorporate a constant marginal tax rate applied to all taxpayers. A CIT with the schedule depicted by FGBC is also quite feasible. In this case, lower income families would be subject to a higher marginal tax rate than higher income families.

Finally, because a CIT is viewed as but one provision of a more general personal income tax, only the tax authority would be involved in programme administration, there is no need for a separate office with responsibility for benefit determination and payments.

Merits and disadvantages

In discussing the strengths and weaknesses of the CIT, I will assume that the plan under consideration has the following characteristics. i) the credits are

awarded according to some scaling formula to all members of a family (hence, the plan is family-size conditioned), ii) the credits are refundable to all families with earnings or income below the break-even point, iii) the income guarantee is about two-thirds of a poverty line that is itself about one-half of median income (hence, the income guarantee is about one-third of median income); iv) a constant marginal tax rate of, say, 30 to 40 per cent would apply at all income levels (except, perhaps, at the highest income levels);⁸ and v) all other income support programmes for working-age people would be eliminated⁹

A credit income plan with these characteristics has a number of **desirable features** in terms of its likely effectiveness in reducing the unemployment and poverty traps and mitigating the disincentives for work implicit in the structure of social welfare systems in many OECD countries. In particular.

- It is a very simple system; no information is required beyond that which is now reported to the tax authority, and no additional administrative structure is needed. Although the administration of a CIT would increase the burden on the existing tax authority, the basic auditing and monitoring activities now practised would simply be extended. This administrative burden would be very small compared to the large administrative costs of the income support policies now in effect in most OECD countries.
- Under a unified tax-and-transfer system such as a CIT, there would be no identifiable population that would be known as “welfare recipients” and would thereby feel stigmatised; such a system could therefore be more socially cohesive than the existing categorical systems in many nations.
- A CIT system would contribute to equity among those who require public income support in order to live at a socially acceptable level; unlike many current systems in which different categories of people are provided different levels of income support, here the basic structure would apply uniformly to everyone.
- A CIT would effectively cut off the bottom tail of the income distribution. The plan described above would, by itself, assure that all families and individuals would have income equal to one-third of median income. Were the structure of the refundable credits set at a level equal to the poverty line for a nation, the programme would, by definition, eliminate poverty.
- Perhaps most important, a CIT would substantially improve work incentives for individuals and families with low wages, low skills, and high rates of non-employment. A CIT plan with the characteristics described above would have a flat rate tax that could be expected to be in the 30 to 40 per cent range, indicating that beneficiaries would experience a sizeable incentive to work and earn income. A marginal tax rate in this range is less than that now

applicable to most non-poor families in those OECD countries with developed social welfare systems.

Offsetting these merits are a number of **disadvantages**:

- Adoption of a CIT would entail major changes in the structure of a nation's income tax. The definitions of taxable income and allowable deductions would both have to be rethought and modified. While income tax systems in most OECD countries are rife with special exemptions, deductions, specialised credits, and allowances, a comprehensive tax base is presumed here, as it is in most discussions of CIT plans. The need for such fundamental tax reforms could pose substantial obstacles to the institution of a CIT programme.
- Relative to existing welfare programmes, the CIT may be less "target efficient", in the sense of focusing net transfers on the lowest income groups in society. Whereas existing programmes are often effective in transferring income to the poor or to other special groups of interest (e.g. the disabled or the unemployed), a CIT is a more general income support programme. Hence, to a larger extent than these alternative measures, assistance would flow to individuals and families who are above the poverty line, or are not members of other target groups.
- Unlike existing income support programmes in most OECD countries, the CIT would not automatically provide income support to individuals and families on a timely basis. When a worker becomes unemployed, or a mother is abandoned by her husband, short-term income support is often needed. Only if a retroactive settlement arrangement is combined with a monthly accounting period is it possible to secure timely benefit disbursement within a CIT structure.
- A CIT is ideally designed to set a **modest** base level of living below which no individual or family will fall. Such an objective is different from that of programmes with very high benefit levels and effective income guarantees now available in some OECD countries (e.g. income replacement rates in unemployment and disability insurance programmes of 60 to 80 per cent). Were the income guarantee level of a CIT to be set at levels sufficiently high to allow it to substitute for existing income support programmes **without harming existing benefit recipients**, marginal tax rates throughout the system – both those on net support recipients and on net taxpayers – would have to be very high – say, up to 50 to 60 per cent or more. Universal marginal income tax rates of this magnitude are likely to be unacceptable in most nations.

Programme costs and labour supply and antipoverty effects

Introduction of such a scheme generates **reductions in expenditures** resulting from the elimination of those income support programmes for working-age people for which it substitutes, **increases in expenditures** (through the refundable credits) for low-wage working people not covered by existing income support programmes, **increases in tax revenues** from some taxpayers due to expansion of the tax base, and, perhaps, **reductions in tax revenues** from some taxpayers due to imposition of lower marginal tax rates at higher income levels. Moreover, countries may wish to supplement such a programme with auxiliary programmes designed to maintain existing wage replacement levels for unemployed or disabled workers, and the additional expenditures from these supplemental programmes must also be considered. An estimation of the effect on net government revenue from all of these changes (and others as well) would indicate whether the policy change would yield an increase or a decrease in net revenue. If a decrease in net revenue were estimated, either the marginal tax rate in the plan would have to be increased or alternative revenue sources would have to be sought through other taxes or reductions in expenditures in other public sector programmes. A CIT programme of the dimensions described in the text is not likely to require a search for alternative revenue sources in most OECD countries, unless high supplemental benefits are provided in auxiliary programmes for special groups of workers such as the unemployed or disabled.

Estimation of the costs (or impact on net revenue) attributable to introducing a CIT plan in, say, a representative OECD country is difficult for several reasons. First, a micro data simulation model based on a representative sample of the nation's population, together with the socioeconomic and income characteristics of each tax-filing unit, must be available. Such models are accepted, state-of-the-art policy analysis tools for evaluating the costs, coverage and distribution of net subsidies of tax-transfer programmes.¹⁰ Second, the estimates provided will be heavily dependent on the parameters of the programme to be evaluated. It is only when the specific characteristics of the proposed programme are known that its effects on public sector costs and the income distribution can be reliably estimated.

A rough sense of the effects on net revenue (costs) and the income distribution of introducing a CIT can be obtained from the results of a particular simulation study done several years ago for the United States (see D. Betson *et al.*, 1982). In this study, a CIT with a guarantee level equal to about 75 per cent of the US poverty line (about 35 to 40 per cent of median family income) was analysed. This scheme was a substitute for the existing income tax, and it was accompanied by elimination of existing welfare programmes, including aid to families with dependent children, food stamps, supplemental security income, and general assistance. In addition, the tax base was expanded to disallow most itemised deductions, and to include social security and unemployment benefits as taxable income. The unemployment

compensation and disability benefit programmes were assumed to remain unchanged. To ensure that the effect of the programme on public net revenues would be zero (that is, the programme would be a “revenue-neutral policy change”), a marginal tax rate of 34 per cent was imposed uniformly on all taxpaying units.¹¹

As expected, the plan transferred substantial income from higher- to lower-income families, reduced the poverty rate (from about 21 per cent to about 13 per cent), and substituted a marginal tax rate of 34 per cent for the very high tax rates imposed on both welfare recipients (“the poverty trap”) and high-income taxpayers.

This study also estimated the labour supply effects from introducing the CIT, together with the other changes in transfer programmes and the income tax. The information used to predict the adjustments in work hours and earnings was based on statistical estimates of labour supply parameters from the Seattle-Denver Income Maintenance Experiment – the largest and most reliable of the US experiments (see M. C. Keeley *et al.*, 1978). The study found that lower-income persons as a group would reduce their work effort because of the introduction of the scheme, primarily because of the relatively large income effect parameters used in the analysis. (Higher incomes for poor families resulted in reductions in their labour supply.) Conversely, middle-income and higher-income workers were estimated to increase work effort, again primarily because of the income effect. Separating the population into net transfer recipients and taxpayers found reductions in work effort of about 3 per cent for lower-income families, but increases of about 5 per cent for higher-income, net taxpaying families. On balance, the total years of labour supply were estimated to **increase** by slightly less than 1 per cent because of the scheme. Total earnings in the economy were estimated to increase by about 1.8 per cent, a greater percentage increase than that for labour supply because the work effort increases were concentrated on the highest-income families.

The negative income tax

Structural characteristics

Discussions of NIT plans often distinguish between **low-guarantee** and **high-guarantee** plans. Low-guarantee plans are viewed as setting some minimal subsistence income level below which individuals would not be permitted to fall, and hence should be viewed as a “base plan”, on which other programmes (e.g. disability benefits, unemployment benefits, wage subsidies) could be built. The low minimum income base of such low-guarantee plans enables the imposition of relatively low marginal tax rates (and, hence, work disincentives) on individuals with earnings both above and below the break-even income level. In Figure 1, the line segments traced out by points DBE would represent the benefit structure of a low-guarantee NIT plan.

It should be noted that, in such a low-guarantee plan, the marginal tax rates on the poor will be similar to those on the near poor and the non-poor. In absolute terms, the work disincentives implicit in such a plan are low, and marginal tax rates on all tax units – both those above and those below the break-even point – could be in the 20 to 25 per cent range in many of the larger OECD countries with large public sector demands were the income base defined comprehensively. Relative to existing tax systems in OECD countries, this pattern would greatly increase the incentive to work. A corollary, of course, is that such plans are not generous; benefits would be well targeted on the poor, but while poverty would be alleviated it would not be eliminated. Relative to income support programmes that currently exist in most OECD countries, this plan would leave a larger poverty gap. Hence, any remaining poverty gap would depend on both the response of low-wage workers to the increased work incentives implicit in the programme relative to current policy and the auxiliary income support programmes designed to replace lost wages of specific groups.

In Figure 1, the line segments FGBC or FGBE represent the benefit structure in high-guarantee NIT plans. The income guarantee in such plans is typically on the order of two-thirds to three-fourths of the poverty line. For those with below-break-even earnings (income), the marginal tax rate applied to earnings would be relatively high in absolute terms – about 65 to 75 per cent¹². These high relative work disincentives would be imposed on the lowest earners, and would be substantially above those faced by the near poor or the non-poor. The substantial "kink" in the benefit-tax schedule at the break-even point, B, is of special note, especially relative to the quite smooth transition to the positive tax schedule of the low-guarantee plan. This large kink makes integration of the income support component of the plan with the positive tax system more difficult than for the low-guarantee plans. Relative to many income support systems in the higher income OECD countries, such high benefit plans decrease work incentives for low income families only modestly, if at all, and hence contribute little to reducing the poverty trap. On the other hand, such high-guarantee plans could effect a substantial reduction in the poverty gap; the extent of any reduction, of course, would depend on the generosity of the existing categorical programmes which would be replaced by the plan. While existing income support systems – often composed of several categorical programmes – treat equally poor people differently, this plan (like the CIT programme) insures equal treatment of people with equally low earnings or incomes.

Merits and disadvantages

As indicated previously, NIT and CIT plans have much in common, especially in terms of the basic structure of transfer benefits. Hence, the assessment here serves only to supplement that offered in the discussion of the CIT

Because a NIT can be divorced from the income tax system, it is possible to raise the size of the basic grant level without requiring a major restructuring of the tax system. As discussed with respect to the high-guarantee plans, while this may increase the target efficiency of the programme by restricting its benefits to those with the lowest incomes, a higher basic grant level may also entail relatively high implicit tax (benefit reduction) rates on low-income recipients if the provision of benefits is not to extend well up into the income distribution.¹³ These higher tax rates reduce the effectiveness of the programme in inducing additional work effort, and mitigating the effect of the unemployment and poverty traps

By divorcing the income support function from the tax side of the system, a separate administrative structure with its own complexities would have to be developed. Because all of those eligible for income support payments would have to deal with a separate administrative agency, it is possible that stigmatisation of this group would occur

Programme costs and labour supply and antipoverty effects

The study cited above in providing crude estimates of the net revenue effects of a CIT can be employed again to provide estimates for a NIT (see Betson et al., 1982). In this study, a NIT with a guarantee level equal to about 75 per cent of the US poverty line (about 35 to 40 per cent of median family income) was also evaluated. (This guarantee of income was the same as the CIT tax discussed above.) As with the CIT analysis, the NIT plan was viewed as a substitute for a variety of existing income support policies, and again a more comprehensive tax base was defined and the unemployment and disability benefit programmes were left intact. The programme was not considered a part of the income tax, in effect, the NIT became a universal income transfer programme to low-income families, thereby avoiding the administrative complexities and gaps in coverage of existing categorical programmes. For all families receiving net transfer benefits, a benefit-reduction rate of 0.5 is imposed on earnings and all other income sources. To be revenue neutral, a marginal tax rate of 23 per cent had to be imposed on all households not eligible for transfer payments.

This relatively low-guarantee NIT reduced the poverty rate less than the CIT programme analysed (from about 21 per cent to about 16 per cent). This version of a NIT substituted a marginal tax rate of 50 per cent for the very high tax rates imposed on existing programme benefit recipients. The tax system simulated was of a "flat-rate" type, and raised marginal tax rates on middle-income families while substantially reducing them for high-income taxpayers.

Following similar procedures and using the same parameters as in the CIT analysis, the study found reductions in work effort of about 6 per cent for the very lowest income families, increases of about 2 per cent for middle- and upper-

income, net taxpaying families, but a labour supply reduction of about 8 per cent on the very highest income class. On balance, the total years of labour supply was estimated to **increase** by only 0.3 per cent because of the scheme as compared to 1 per cent in the CIT analysis. Total earnings in the economy were estimated to increase by less than one-half of 1 per cent (as compared with 1.8 per cent in the simulated CIT)¹⁴

The basic income guarantee

Structural characteristics

Referring again to Figure 1, the income supplement structure of a BIG plan could be described by ABC. At zero income (earnings), poverty line (or social minimum) income is guaranteed through basic grants or refundable tax credits to individual adults (and in some variants, to children, paid to the children's guardian). As with the CIT, all income and earnings received are "taxed" at a marginal tax rate which is sufficient to yield zero net revenue costs. Because most discussions of BIG proposals envision a social minimum income level which is at least 0.5 of median income, the required marginal tax rates on all earners above the breakeven level are high (in excess of 0.5 or 0.6). As with the CIT, it is assumed in most discussions of BIG plans that income taxes are levied on all incomes, and that the tax base is comprehensive. The programme can be designed so that benefits are paid to family units, with varying amounts paid to of different sized families. Alternatively, the programme can be designed to provide payments to individual adults, or to adults and children.

In the standard variant of the plan designed to reduce the work disincentives on middle- and upper-income workers (e.g. ABC in Figure 1), a marginal tax rate of 100 per cent on workers with earnings below the guarantee level has been suggested. Such BIG plans with very high marginal tax rates on earnings (income) below the break-even level are very efficient at targeting their benefits on the lowest-income families in the nation. By definition, the aggregate amount of public transfers going to the poor is very large in this variant of the plan, though the effect of the policy on the incomes of the poor depends in part on the work response of lower-income workers to the high level of income which is guaranteed, and the high (up to 100 per cent) marginal tax rates that are imposed on them.

Merits and disadvantages

Most discussions of BIG schemes envision an income guarantee set at the level of an acceptable social minimum or national poverty line. Two forms of BIG plans have been mentioned: a plan in which the guaranteed benefit is considered taxable income, and hence would be partially "clawed back" by the revenue (income tax)

system, and a plan in which the credits are not taxable, but families are liable for income tax on all other income. Either of these variants of a BIG scheme can be thought of as a particular form of CIT or NIT. The effective level of the credits (or guarantee) provided in BIG plans typically exceeds that considered in discussions of the typical CIT or even high-guarantee NITs. Although the implications of the plan for the income tax structure are seldom spelt out in BIG proposals, a common presumption is that all (or most) tax allowances would be eliminated if the plan were implemented, in effect, taxation would be based on a comprehensive definition of income. In any case, and with either variant of the plan, the marginal tax rate applied to all earned income would be higher under the BIG plan than under other CIT and NIT proposals. This is inevitable if the scheme is to be revenue neutral or self-financing, given the high level of the social minimum income level in many OECD countries.

A BIG programme is typically seen as having two primary benefits relative to the sort of income transfer system now in place in most OECD countries. First, there is no need to determine a person's employment status in deciding on the benefit, and this would result in savings in administrative costs. Second, by providing a benefit that approaches the social minimum income level, a BIG programme provides income support for the working poor – those who work but receive a wage rate which is insufficient to bring them to the social minimum income level.

Relative to the lower-guarantee CIT and NIT plans most commonly discussed, BIG plans afford more “adequacy” in covering the needs of all families. Setting the income guarantee at the level of the social minimum income level guarantees this outcome. However, consistent with the “iron law” that governs all income support schemes offering universal coverage, the high level of the BIG guarantee requires that high marginal tax rates – around 50 per cent or more – be applied to all earned and other income. Hence, the primary disadvantage of BIG plans is the substantial work disincentive (via high marginal tax rates) that applies to families of all income levels.

Programme costs and labour supply and antipoverty effects

No simulation studies of the sort discussed above for the CIT and NIT plans have been performed for BIG proposals. Extrapolating from the results discussed above, the income redistribution and poverty reduction resulting from a BIG plan would be greater than that of a CIT or NIT, and in all likelihood greater than that of existing income support systems in most OECD countries. However, the very high relative marginal tax rates imposed on all workers suggest that the aggregate reduction in labour supply would be substantially greater than for the CIT or NIT plans. Whether substituting a BIG plan for existing income support systems in OECD countries would increase or decrease aggregate labour supply would depend

on the structure and generosity of the separate income support and wage replacement programmes which a BIG would replace.

Earnings supplement (ES) or earned income tax credit (EITC) plans

Structural characteristics

Earnings Supplement plans base supplemental payments on the **earnings** of individual **workers**, unlike the previous plans discussed; in these latter cases, benefits are conditioned on **family income** and family size. In Figure 1, the schedule represented by OGB describes an earnings supplement plan. There is no guarantee in this plan, and (as drawn) the programme subsidises the earnings of all workers whose earnings are below the poverty line.¹⁵ **Marginal** earnings are subsidised only up to the earnings level corresponding to the kink in the schedule (point G in the figure) For increases in earnings by low-earnings workers, a negative marginal tax rate (or a marginal subsidy rate) is applied to incremental earnings For workers with earnings above this level and up to the poverty level, the schedule resembles that of a negative income tax, with incremental earnings subject to a marginal tax rate In most analysis, a marginal subsidy rate of from 20 to 40 per cent is discussed; the marginal tax rate is usually set at less than 25 per cent.

Merits and disadvantages

Earnings supplement plans have a variety of strengths and weaknesses that should be noted

- ES plans can readily limit eligibility to specific groups of workers such as family heads or family heads with children; it does not have to be a universal programme Moreover, the schedule could be adjusted for family size.
- ES plans provide strong work incentives for very low-wage or low-earnings workers For them, a supplement is added to their total earnings, and each additional dollar earned is supplemented as well¹⁶ For workers above the maximum supplement point (point G in Figure 1) but below the poverty line, a supplement is also added to total earnings However, for workers in this earnings range, marginal earnings are subject to a tax rate Hence, for these workers, both the income effect and the substitution effect tend to discourage additional work effort Because the distribution of earnings tends to be bell-shaped, the density of workers is greater through the positive tax rate portion of the schedule than through the low earnings, subsidy rate portion of the schedule.¹⁷
- While these marginal work incentives are mixed in terms of incremental increases or decreases in work effort, relative to a NIT or a CIT, an ES provides no benefit or transfer to those who are not employed. Hence, an

important effect of ES plans is the encouragement to move from non-employment (which under current policies are often subsidised through categorical, benefit programmes, or welfare-type plans) to labour force participation. For any worker eligible for earnings supplementation, the effective wage rate associated with working is raised by the plan; similarly, in comparing the income associated with non-work and transfer receipt with the income associated with working, the existence of ES plans cause the work option to appear more attractive relative to not working. In a real sense, ES plans “make work pay” for low-skilled working-age people. As such, an ES substantially reduces the “poverty trap” effects that characterise many existing income support programmes.¹⁸

- Because there is no minimum income guarantee in ES plans, they cannot serve as a nation’s sole income support programme, or even as the base plan in an income support system. However, ES or EITC plans can be readily combined (or integrated with) other plans such as NIT or CIT programmes. Integration, however, must be carefully designed so as to avoid very high cumulative marginal tax rates over that range where both plans have positive marginal tax rates.
- The EITC variant of earnings supplementation arrangements can easily be integrated with the positive income tax structure. If integrated, the plan is an integral part of the tax schedule, and administration of the plan is by the tax authority. Moreover, because the ES requires only information on earnings, it is relatively simple to administer.

Programme costs and labour supply and antipoverty effects

While a good deal of evidence on programme costs is available, there is little reliable evidence of the labour supply effects of an earnings supplement. In the following discussion, we draw upon recent analyses of the Earned Income Tax Credit in the United States, which was substantially expanded by legislation passed in 1993.¹⁹ The plan that is discussed is that legislated in 1993 to be in effect in 1996.

The 1996 EITC will provide transfer benefits to nearly 13 million American families, with costs of nearly \$20 billion. Workers living in or near poverty will receive about two-thirds of these benefits. For a family with two children, earnings will be subsidised at a rate of 36 per cent up to nearly \$8 500 of earnings – implying a maximum earnings supplement of over \$3 000. At \$11 000, the phase-out of the \$3 000 supplement begins, and the implicit tax rate of the phase-out is about 20 per cent. Families earning up to \$27 000 are eligible for some earnings supplement. It is estimated that with this plan in effect nearly 1.4 million households will be taken out of poverty because of the EITC and the poverty rate of families with children would be reduced by about 15 per cent.

Clearly, the EITC has strong work incentives for lower-income families – especially those experiencing the “negative” marginal tax rate of 36 per cent. However, the EITC causes reduced work incentives for families (with two children) who are earning more than \$11 000, and it is in this region of the earnings distribution that the density of the population becomes heavy. Offsetting this disincentive effect is the positive work effect of the incentive to move from joblessness to employment. Scholz summarised the labour supply effects of the United States EITC as follows:

“The credit, in aggregate, is likely to reduce the hours worked by workers, [but] the economic significance of the effects is small. Moreover, to the extent that taxpayers are unaware of the effects of the credit on after-tax wages, both the positive effects of the credit in the subsidy range, and the negative effects of the credit on taxpayers in the phase-out range, are overstated. Thus, the best available empirical evidence suggests that the EITC has a small, but detrimental, effect on the hours of workers. What’s missing from [these estimates, however] are estimates of the EITC’s effect on labour market participation. The credit has unambiguously positive labour market incentives on the decision of whether or not to work. We estimate that the aggregate increase in hours generated by increased labour force participation would be roughly 74 million hours [This estimate can be compared with our estimate of the decrease in work hours of workers who face the marginal disincentives of the EITC.] The simulations suggest that the aggregate reduction in hours supplied by working households, 54.5 million, would be more than fully offset. . . The important point, however, is that one cannot forget about the participation margin when thinking about the labour market effects of the EITC” (John Karl Scholz, 1995).

A wage rate subsidy: objectives, impacts, and issues

By augmenting the hourly wage of low-wage workers, the wage rate subsidy²⁰ contributes to poverty reduction among this population. Simultaneously, it provides incentive for additional labour supply, offsetting the tendency of standard income support programmes to create a “poverty trap”. Further, in an economy with a substantial minimum wage policy, the adverse employment effects of the minimum wage tend to be countered and offset by a wage rate subsidy²¹. These three unambiguous effects are its primary merits.

However, perhaps more than other antipoverty measures the wage rate subsidy creates a variety of economic impacts that need to be taken into account in an evaluation of it. In particular, wage rate subsidy programmes

- tend to erode the market wage of low-wage workers by inducing an increase in the supply of labour in response to the higher “take-home pay”. In part, this bidding-down of market wage rates is what gives this policy its poten-

tially large effect on employment. With lower market wages, low-skilled workers become more attractive to many employers;²²

- simultaneously reduce the benefits to a low-skilled worker of investments (such as education, training, or job search) designed to increase the wage rate. There is an effective marginal tax rate imposed on increases in wage rates, as opposed to the subsidy placed on increased labour supply and hours worked;
- tend to create incentives for workers to under-report wage rates, to over-report the number of hours worked, and to engage in non-reported sector work. Moreover, a wage rate subsidy offers an incentive to both workers and their employers to collude in misreporting the worker's actual wage rate;
- require substantially different information for their effective administration than is available to tax authorities in administering existing income tax laws. While existing tax laws focus on earnings and income, the effective administration of a wage rate subsidy requires information and documentation of hourly wage rates and the number of hours worked;²³
- provide work-related income supplementation to low-wage workers as opposed to low-income workers and their families. In fact, many low-wage workers are secondary workers (*e.g.* children and spouses) in high- and middle-income families. Hence, the "target efficiency" of a wage rate subsidy may be lower than that of a CIT or an NIT.²⁴

An employer-based marginal employment subsidy: objectives, impacts, and issues

Unlike the policies discussed above, an employer-based subsidy designed to increase the employment of low-skilled workers does not directly increase the earnings and income of low-wage workers and their families. Rather, such a subsidy has its impact indirectly by altering the relative market demands of employers for inputs in favour of low-skilled workers. As a result, the wage rates of lower-skilled workers tend to be bid up, and more low-skilled workers are able to find work. As with the wage rate subsidy, the workings of the market in response to the programme lead to increased employment and reduced poverty for low-skilled workers. By operating on the demand side of the labour market, such subsidies tend to offset the adverse employment effects of the minimum wage, thereby reducing the effect of existing income support programmes in creating a poverty trap. As indicated above, the New Jobs Tax Credit Programme, which was in place in the United States in the late 1970s, is an example of such a marginal employer-based jobs subsidy plan. Both empirical studies of the employment effects of the New Jobs Tax Credit and simulation analyses of marginal employment subsidies suggest that such a

strategy is effective in stimulating employment at reasonable public costs relative to alternative job creation measures²⁵

As with a wage rate subsidy, several issues need to be carefully considered prior to implementation of a national plan, including:

- the development of an employer-based employment subsidy programme which is marginal in its impact needs to attend carefully to issues of design. Existing employer-based job subsidies (for example, the Targeted Jobs Tax Credit in the United States) tend not to be targeted on the marginal employment decision;²⁶
- the target effectiveness of an employer-based subsidy needs to be carefully considered in its design. The programme needs to be designed so as to create an incentive to employers to hire low-wage workers, as opposed to simply hiring more workers;
- the incentives implicit in such a system could tend to induce employers to “cycle” their production decisions, or to “churn” their labour force, in order to maximise the amount of the subsidy that they receive.²⁷ The design of such a programme must ensure that such cycling or churning behaviour is minimised.

Again, it should be emphasized that an employer-based marginal employment subsidy programme cannot provide the basis for safety net coverage of the population and for effective poverty reduction. However, as a component of a more general restructuring of the low-wage end of the labour market, such a subsidy can contribute to increased employment of low-skilled workers, and hence mitigate any existing unemployment or poverty trap created by existing income support policies.

EMPLOYMENT-CENTRED SOCIAL POLICY: A STYLISED REFORM STRATEGY

The discussion of the six central strategies for simultaneously reducing the “poverty trap”, providing adequate income support, and increasing both labour supply and labour demand carries one clear lesson

No single policy is capable of both assuring adequate income support to those without sufficient earnings (i.e. poverty reduction) and stimulating an increase in the employment of low-skilled workers. The “iron law” of income support needs to be again emphasized: an income guarantee assuring all citizens of an “adequate” level of living financed via a personal income tax requires a structure of marginal tax rates implying substantial work disincentives. And, the higher the guarantee, the more severe are the work disincentives.

Consistent with this proposition, the CIT and the NIT could be effective instruments for i) providing a minimum income floor below which no individual or family

would fall, and ii) reducing the serious disincentives to work that are implicit in existing social policies (*e.g.* unemployment, disability, and welfare income support policies). However, neither of these policies would likely induce a sizeable increase in the demand for the services of low-skilled workers, and hence, on their overall employment levels

Conversely, the work-conditioned policies discussed above – earnings supplements, wage rate subsidies, and employer-based marginal employment subsidies – are capable of i) increasing the returns to labour supply and work, ii) increasing the effective demand for the services of low-skilled workers, and iii) contributing to the reduction of poverty through increasing the rewards from working. Such measures, however, are not effective in providing a minimum income floor beneath all individuals and families

These conclusions suggest that a judicious combination of these policies could be implemented simultaneously to

- provide a minimum income floor under all individuals and families,
- eliminate the serious work disincentives implicit in existing social policies, and indeed to create positive incentives for increases in the labour supply of low-skilled workers, and
- stimulate the demand of private and public employers for the services of low-skilled workers.

A prototypical growth-with-equity strategy

In this section, I sketch a possible combination of income support and labour market reform policies that would contribute to simultaneously securing these goals. This combination of policies should be viewed as illustrative of a general strategy designed to simultaneously reduce poverty and promote self-sufficiency. Hence, its objective is to stimulate discussion leading to policy changes with this goal, and not to argue the superiority of this prototypical approach relative to alternatives with a similar purpose. I would emphasize that this discussion does not address a variety of measures that would complement this policy constellation in reducing the “poverty trap” and generating increased employment. These include macroeconomic policies, education and training (human capital investment) programmes, migration policies, relocation policies, and policies designed to relax the constraints on the operation of the labour market (*e.g.* minimum wage policy, employer layoff constraints, and so on).

Although this illustration of a growth-with-equity strategy may appear both more feasible and effective in a context in which existing support levels available from public income transfers are relatively modest {such as those in the United States), modification or supplementation of some of its attributes would increase

its usefulness for other OECD countries. This point is addressed further in the final part of the paper

The core policy changes that could comprise this blueprint include:

- *A scaling back of the generosity of retirement pensions and a delay in the normal age of retirement*

These measures would free up budgetary resources to support a series of new programmes (see below), and would simultaneously *i)* reduce the incentives for early retirement, and *ii)* increase the incentive for private saving to support retirement in later years

- *Elimination of existing programmes for disability income transfers, unemployment compensation benefits or welfare benefits, or scaling back the benefit levels in the disability and unemployment programmes and establishing these programmes as supplements to the basic income support measures described below*

The elimination or scaling back of these programmes would also free up budgetary resources to support the new programmes, and would eliminate or moderate the effects of those aspects of the social welfare systems in many OECD countries that contribute to high work disincentives and the “poverty trap”.

- *Establishment of a credit income tax programme*

In this programme, a family’s income would be defined comprehensively, and a tax credit would be awarded to each living unit (or taxpaying unit) according to how large it is and who lives in it (for example, the adult/child composition of the unit). This credit would guarantee to taxpaying units a minimum income that would be set at a fairly low level, perhaps one-half or two-thirds of the explicit or implicit poverty line in the country. Units with no other means of support would receive the full amount of the credit as a grant; those with some other income would receive smaller net payments; better-off families would receive no net payment. This programme would be integrated with the positive income tax, so as to yield a smooth marginal tax rate pattern

As a result of this low-guarantee component of the plan, “hard-core” poverty would be eliminated, as the bottom tail of the nation’s income distribution would be cut off. However, it must be recognised that the minimum income which is ensured by this base income support plan is low (as a percentage of median income) relative to accepted benefit levels for unemployment, disability, and retirement pension programmes (and safety net welfare programmes) in those OECD countries with large and generous transfer systems. As a result, replacement of these programmes with only the universal CIT would entail increased overall poverty rates, even though “hard core” poverty would be eliminated. Income losses by recipients of existing generous programs could be offset either by increased earnings associated with improved incentives for labour supply and the employment

subsidies which are also part of this proposal, or the adoption of categorical unemployment, disability, and retirement programmes designed to supplement CIT benefits (This latter option is implicit in the second point, and is discussed in the following section.)

A central gain from this component of the proposed arrangement is the substantial increase in work incentives relative to those inherent in the existing high benefit-reduction rates of the income support programmes of most of the larger OECD nations. A universal CIT would also strip away the complexity of the melange of current programmes, and eliminate much of the stigma associated with welfare programmes. With a CIT integrated with the standard income tax structure, incomes would be taxed and support provided in a simple, open, universal, and just manner.

- *Adoption of a two-pronged employment subsidy programme for low-skilled workers*

A major source of the inequality and unemployment in OECD countries is the differences among various groups in access to jobs, especially to jobs with decent pay, stable employment, and a promising "job ladder". Member countries generally face a situation where minorities, youths, disabled workers, and single mothers – all characterised by low levels of skill and education – face relatively bleak labour market opportunities.

The labour market problem that confronts disadvantaged workers is primarily a structural employment problem; joblessness for certain groups existing in the midst of attractive employment prospects for other groups. The most basic reason for this is the inherent lack of skills and education of the lowest-wage workers – hiring them simply does not generate much additional output and profit for employers. This problem is compounded by reduced labour demand and the distortionary effects caused by the combination of minimum wage laws, union wage contracts, and the fringe benefits and payroll taxes that businesses are required to pay for every standard worker. These constraints contribute to the labour market disadvantage of the low-skilled.

The proposal offered here is two-pronged, aimed both at disadvantaged workers and those who hire them. Its effect would be to alter the terms on which workers could be hired – in effect, to make hiring low-skilled workers a more profitable and attractive proposition than it is now. Both prongs of the policy are designed to offset constraints on labour demand from market rigidities, and increase the employment of less-skilled workers.²⁸ Business costs would tend to fall, while output would tend to increase.

An employer-based marginal employment subsidy

This prong of the programme would be designed in line with the description above, and would provide financial incentives to employers who hire low-skilled workers over and above the amounts that they would otherwise hire. Hence, the

subsidy would be marginal in nature, affecting the decisions of firms regarding both the level of inputs to hire and their composition

While such a programme has been tried by the United States – the New Jobs Tax Credit – a wide variety of modifications could be made to its structure to increase its employment generating potential.²⁹

A wage rate subsidy

The second prong of this programme focuses on the low-skilled workers themselves. An employee-based subsidy programme would be instituted for disadvantaged workers and those with long-term and persistent unemployment problems. Some portion of the wages of low-wage workers would be subsidised by the Government, giving the worker a labour market advantage, and hence an incentive to seek work. Workers would be encouraged to exercise job-seeking initiative on their own behalf; the programme is oriented to the supply side of the labour market for low-skilled workers

The new labour market environment will improve the employment prospects of disadvantaged workers by generating ongoing demand- and supply-side pressure for the creation of jobs for them at reasonable cost. As such, it will equalize employment opportunities. By targeting the additional employment on segments of the labour market with the most severe unemployment problems and the greatest susceptibility to “poverty trap” problems created by existing tax and transfer programmes, employment and output could be increased without significant inflationary pressure.

This two-pronged labour market programme will fundamentally alter the wage structure in private labour markets, raising the take-home pay of low-skilled workers relative to those with more secure positions in the labour market. It would reduce inequality in employment and earnings in a way that encourages independence, work, and initiative

And, How Much Would this Strategy Cost?

Clearly, the changes in programme structure and coverage of the type and magnitude of those suggested by this prototypical constellation of proposals will alter both the supply and demand of low-wage labour, and the operation of labour markets. Incomes will be redistributed, and substantial changes in the incentive to work will occur. As a result, estimating with any precision the budget cost of such a reform is impossible. However, some rough notion of the magnitude of budgetary costs and labour supply impacts seems feasible, the following rough estimates apply to the situation in the United States

Start, for example, with the CIT, set at one-half to two-thirds of the poverty line. Drawing from the simulation study for US reforms discussed above, a plan of this sort (accompanied, it will be recalled, by the elimination of existing welfare programmes) would transfer around \$25 to \$30 billion of additional income support to

low-income families, requiring a small increase of taxes on higher-income taxpayers. In 1992, federal personal income tax revenue was nearly \$500 billion, implying the need for increased tax revenue of about 5 per cent should no other changes occur. However, because a CIT also implies a reform of the personal income tax structure, with tax base broadening and the elimination of personal exemptions and deductions, the required increase in revenue could be accomplished with little or no increase in tax rates

This programme alone would substantially increase the work incentives for low-income people who are currently recipients of unemployment, disability, retirement, and welfare benefits, although the possibly higher taxes required of upper-income families would reduce incentives by some small amount

The employer-based marginal employment subsidy is patterned on the New Jobs Tax Credit that was in effect in the United States in 1977-78. This programme (described above) has been evaluated as having a substantial impact on the labour demand for low-skilled workers (see Note 29 below) The subsidy was paid on nearly 1 per cent of the labour force, at a cost to the federal government of \$2 billion. This would translate into a \$10 to \$15 billion programme today, especially if supported by publicity and a commitment to reduce bureaucratic difficulties. Clearly, the net drain on the national treasury would be smaller if the increased labour demand expected from such a programme did indeed lead to substantial additional employment (and tax payments) for low-wage workers.

Finally, consider the wage rate subsidy. A number of years ago, the costs of a wage rate subsidy which paid a subsidy equal to 50 per cent of the difference between the actual wage rate and about \$10 per hour (in 1993 dollars) were estimated using a simulation model (see the paper by David Betson and John Bishop in Haveman and Palmer, 1982) In current dollars, this estimate suggests that such a wage rate subsidy made available to all heads of families with children would entail a budget cost of, roughly, \$5 to \$10 billion Because such a programme increases the incentive to low-skilled workers to supply labour, this estimate is probably an upper bound

The entire package, then, carries a cost figure of about \$35 to \$60 billion, less than 5 per cent of current federal revenue, and about equal to one year's growth in federal revenue For this cost, a substantial increase in the adequacy and equity of the nation's income support system would be attained, and a radical change in the operation of the low-wage labour market would be accomplished The increases in both the incentive *to* work and in the inducement to firms to target employment growth on low-skilled workers could lead to a sizeable increase in the amount of low-wage labour supplied and in the aggregate level of employment and earnings of workers with few skills and little education The above speculations regarding programme cost, it should be noted, do not take into account the increased work and associated tax payments attributable to the programme

A FINAL NOTE ON THE DILEMMA OF SOME OECD COUNTRIES

The objective of this paper is to identify a range of universal options that, either alone or in combination, could simultaneously provide income support to the poor families of a nation and encourage work effort and individual initiative. These options have relevance to those OECD countries with developed and generous income transfer (eg unemployment, disability, retirement, and welfare) programmes. These countries tend to have more severe unemployment and poverty trap problems caused by generous and easily accessible public benefits than do countries with less fulsome benefit arrangements. I have suggested that substitution of universal income guarantee-employment promoting measures for categorical, high benefit (eg wage replacement rates of 60 to 80 per cent) income support programmes could mitigate the growth-inhibiting poverty trap problems that these nations now confront.

However, the income guarantee at the heart of the "blueprint" strategy that I have suggested lies well below the implicit minimum income provided by existing programmes in those OECD countries with the most generous benefits. This high minimum income level cannot serve as the income guarantee level were universal income support measures (eg a CIT or NIT) to be substituted for a system of categorical benefit programmes. Where a general CIT or NIT required to set an income guarantee level as high as even 50 per cent of median income in these countries, the marginal tax rate imposed on *all* earnings would be intolerably high if the policy reform were to be budget neutral. While the poverty-unemployment trap would be reduced for current benefit recipients, severe work incentives would be imposed on the remainder of the population. Such a policy substitution seems economically and politically unworkable.

Two options seem possible. First, those OECD countries desiring elimination of the poverty trap and an increase in work incentives and employment for low-skilled workers must face the fact that the replacement rates now in force in some of their programmes need to be scaled back if the benefit levels in these programmes are to be taken as indicators of the socially acceptable minimum income. While this is a difficult political pill to swallow, the "iron law" of income support policy described above indicates that high guaranteed incomes and strong work incentives are incompatible objectives.³⁰

There is also a second option. Governments can decide that the acceptable level of the income guarantee for all citizens save those included in restricted categories (eg the disabled or the unemployed) will be set at a rather low level of, say, 30 to 40 per cent of median income. Such a guarantee could be secured through a universal CIT or NIT. In addition, individuals eligible for benefits in supplemental categorical programmes designed for them would have higher income guarantee and replacement rate benefits. Then, a comprehensive and universal

income support system supplemented by such categorical programmes could be financially feasible and workable. A modest income floor would be established below all working-age families, and work incentives would be maintained. However, in this case it must be admitted that the workers included in programmes in the special categories will not face the desirable work incentives that confront the remainder of the population, for them, something of a poverty trap will persist. If this strategy is followed, it could be desirable to erode over time the seriousness of the trap by incrementally reducing the replacement rates incorporated into these programmes, and restricting the eligibility criteria applied in granting access to benefits.

In sum, little progress can be made in creating a labour market environment for low-skilled or unemployed workers which encourages work and self-sufficiency unless one or another of these politically difficult options are chosen.

NOTES

1. The following description focuses on the programmes providing support to the working-age population, and hence does not discuss the work incentives implicit in the Social Security retirement programmes. Descriptions of the nature of welfare and labour market policies among member countries are available in several OECD publications. A basic description of the eligibility and coverage provisions of several of the programmes is US Social Security Administration, Office of Research and Statistics, "Social security programmes throughout the world- 1995", Social Security Administration Publication No. 13-1 1805, Research Report No. 64, Washington, DC, July, 1995. The effects of benefit programmes, employment protection, and minimum wage programmes on employment, joblessness, wage adjustment, and economic growth are discussed in OECD (1994), Chapters 5, 6, 8, and 9.
2. Edmund Phelps has analysed the effect of these distortions in the framework of "natural unemployment rate" theory, concluding that their impact is to drive up the natural rate (Edmund S. Phelps, 1994). The theoretical underpinnings of Phelps' natural rate model have been challenged by a number of reviewers; these challenges are alluded to in Phelps (1995). See also Richard Layard, Stephen Nickell and Richard Jackman (1991).
3. A "Credit income tax" is also known as a "universal refundable tax credit."
4. In most such programmes there are only a few categories on which the basic grant would be differentiated (perhaps age, health status, or being a single parent, but would not include employment or earnings status).
5. Hence, an earnings supplement programme can be divided into two parts: the marginal supplement part (where individuals both receive increasing supplements as earnings increase and a positive total supplement to income) and the marginal tax part (where the supplement received by individuals decreases as their earnings increase, even though they are receiving a positive supplement to income).
6. The programme described is similar in structure to the New Jobs Tax Credit Programme that was in place in the United States during the late 1970s (see the section on the six policy strategies: analytics and assessment, below). The design of such a programme could modify these provisions on several dimensions. The subsidy rate could be increased to more than 50 per cent, which would provide a greater incentive for hiring labour relative to other inputs (while of course increasing costs). The base level of wages that are subsidised could also be increased, again increasing the level of the employment subsidy provided, but also decreasing the targeting of the subsidy on the lowest wage workers. Finally, the "cut-in hiring level" at which the programme takes

effect (the 102 per cent of last year's employment in the above example) could be reduced to, say, 100 per cent, providing employers with a subsidy on any workers hired beyond last year's level. Receipt of the subsidy could also be conditional on employer measures to provide on-the-job training or to promote long-term employer-employee relationships.

7. For example, if the basic income grant for an individual was \$2 000, and the marginal tax rate on other income was 0.2, the break-even level would be \$10 000. Only if the individual had income receipts in excess of \$10 000 per year would he owe any net taxes.
8. A marginal tax rate in the 30 to 40 per cent range would raise sufficient net tax revenue to support a set of public sector programmes and activities such as those in OECD countries with a relatively large public sector. The required size of the **marginal tax** rate varies directly with the size of the public sector budget relative to the nation's GDP.
9. Below, I discuss the implications of supplementing a CIT programme with programmes providing special benefits for particular groups of workers currently covered by high wage-replacement rates in many OECD countries.
10. See Constance F. Citro and Eric A. Hanushek (1991). The more advanced of these models take account of estimates of the responses of individuals to the relative price and income effects of the policy. Micro data simulation models which incorporate such behavioral elasticities are generally viewed as more reliable than models that ignore behavioral effects. This is so, even though available behavioral response estimates vary widely. While the use of such models has become accepted in the United States and Canada, they are not generally available in many OECD countries.
11. A related exercise is found in **OECD (1994)**, Chapter 9. There, an estimate is made of the required marginal tax rate of a linear income tax with a comprehensive tax base for a basic income guarantee equal to 30 per cent of average personal factor income for four countries (the United States, Australia, France, and the United Kingdom). The resulting marginal (and average) tax rates range from 34.5 to **39.3** per cent. This is a "macro" calculation, however, and hence does not yield estimates of antipoverty impacts, or labour supply effects.
12. This estimate, of course, reflects the relatively large public sector revenue demands of the larger and higher-income **OECD** countries, especially those in western Europe.
13. It should be noted that lower marginal tax rates in conjunction with a high basic grant cause the plan to provide net benefits to families in the income range where the distribution becomes increasingly "thick". As a result, such programmes may require reductions in net revenue available to other public programmes if they are to be viable.
14. The smaller labour supply and earnings increases simulated for the NIT (relative to the CIT) are due to the higher marginal tax rate imposed on net taxpayers, especially those at the top of the income distribution.
15. Clearly, depending on the structure of the supplement, the subsidy could be extended to workers whose earnings exceed the poverty line.
16. It should be emphasized, however, that for workers in this earnings range, the "income effect" discourages additional work, which tends to offset the encouragement to additional work provided by the marginal subsidy rate.

17. John Karl Scholz (1994) estimates that with the 1996 United States EITC provisions, there will be 3 million taxpayer units (households) in the subsidy range, 2 million units in the flat range, and nearly 8 million units in the phase-out range, where the work disincentives take their toll.
18. It provides both the incentive and financial support for working to escape the poverty trap, but the incentive ceases prior to a full escape if the poverty line lies above the kink point.
19. The following discussion draws upon three recent analyses of the EITC: John Karl Scholz (1994); Stacy Dickert, Scott Houser and John Karl Scholz (1995); and Richard Burkhauser and Andrew Glenn (1993).
20. For more technical discussions of the analytic underpinnings of wage rate subsidy proposals, see John Palmer (1978), and Robert Haveman and John Palmer (1982), especially the papers by Robert Lerman and David Betson and John Bishop.
21. Analytically, in a competitive labour market, an important effect of a minimum wage policy is to reduce the quantity of services of workers whose productivity is at or below the minimum required wage demanded by employers. As a result, while some low-skilled workers benefit from a minimum wage policy, others find their employment prospects eroded. Higher unemployment of low-skilled workers is a direct result of the minimum wage. When introduced into an economy with a relatively high minimum wage policy, a wage rate subsidy tends to offset the employer response to the minimum wage, expanding the demand for low-skilled workers that has been reduced by the minimum wage.
22. Some view this effect as an important disadvantage of a wage rate subsidy, arguing that the reduced market wage serves as an implicit subsidy to employers. However, if goods markets are competitive, reduced costs to employers tend to be passed along in lower prices for goods and services. With non-competitive markets for goods and services, however, there could be some financial windfall accruing to employers. Indeed, analysts who view such windfalls to be a natural accompaniment of wage rate subsidies often call for wage rate subsidies and minimum wages to be introduced simultaneously, or for changes in wage rate subsidies to be accompanied by offsetting changes in minimum wages.
23. There are a wide variety of other administrative issues that would need to be confronted in implementing a national wage rate subsidy programme. For example, how would tips received or fringe benefits be handled in calculating the subsidy? How could benefits be related to family needs? Should benefits be paid directly to the worker, or paid to the worker through the employer?
24. A wage rate subsidy, however, could be made more target efficient – more effective in reducing poverty per dollar of cost – by limiting eligibility for the benefit to family heads and, perhaps, gearing the size of the subsidy to the size of the worker's family.
25. For evidence on the effect of the New Jobs Tax Credit on employment levels, see Robert Haveman and John Bishop (1979); and Jeffrey M. Perloff and Michael Wachter (1979). Dale Mortenson has undertaken a simulation experiment using a calibrated model of job creation and job destruction to analyze the effects of a New Jobs Tax Credit type programme. He finds very substantial employment and aggregate income

effects, and concludes that this policy is far more cost effective than alternatives to it (Dale Mortenson, 1994).

26. Several assessments of employer-based employment subsidy programmes instituted in various OECD countries have concluded that they have not been cost-effective policy instruments for generating employment. See, for example, OECD (1994), Chapter 6, and OECD (1993), Chapter 2. It should be emphasized that none of the programmes reviewed were *marginal* subsidy arrangements, which is a key element in the plan discussed here. Without concentrating the subsidy on the marginal employment decision of the firm, the problems of displacement, substitution, and deadweight costs discussed in these assessments are likely to be important. It should be noted that the New Jobs Tax Credit programme of the United States (noted in section on alternative policy strategies designed to increase employment and reduce the poverty trap) is a marginal employment subsidy. However, various aspects of its design seem arbitrary, and open to question. For example, it is not clear where to set the "cut-in hiring level" (1.02 per cent of last year's employment level in the New Jobs Tax Credit programme) at which the subsidy would begin to be paid. If the cut-in level is set too low, employers will be subsidised on hiring decisions that they would have made were such a subsidy not in effect, and this would be simply a windfall to employers. If the cut-in level is set too high, few employers would be able to respond to the hiring incentive which it intends. Similarly, the magnitude of the subsidy rate, the amount of earnings on which the subsidy will be paid, and whether or not the subsidy will be paid for part-time or part-year employees, are all design issues that would need to be resolved.
27. For example, an artificially low employment level this period would make it easy for the firm to attain the cut-in hiring level next period, and hence be eligible for a large subsidy on the added workers hired. See the paper by Charles Wilson in Haveman and Palmer (1982).
28. The case for such a labour market strategy is made in Robert Haveman (1994), Appendix to Chapter 7. See also the paper by David Betson and John Bishop in Haveman and Palmer (1982). Edmund Phelps estimates that wage incomes of \$7 000 or less could be raised to about \$11 000 with an employment subsidy programme that would cost about \$100 billion per year. His claim is that this is a relatively small price to pay for the reduced social costs in the form of crime, substance abuse, and the loss of spirit associated with the current US arrangements. The empirical basis for this assertion is unclear. See also Edmund S. Phelps (1994a).
29. Some of the issues that would have to be considered in designing an effective *marginal* and *targeted* employment subsidy programme are discussed in John Bishop and Robert Haveman (1978 and 1977).
30. Viewed this way, the policy strategy suggested above would seem more feasible for those OECD countries with benefit levels and replacement rates set at lower percentages of median income (such as the United States) than for countries with higher percentage rates (such as some of the northern European countries).

BIBLIOGRAPHY

- BETSON, David, David GREENBERG, and Richard KASTEN (1982), "A simulation analysis of the economic efficiency and distributional effects of alternative program structures: the negative income tax versus the credit income tax", in *Income-Tested Transfer Programs: The Case for and Against*, ed. Irwin Garfinkel, New York, Academic Press.
- BISHOP, John (1977), "The administration of a wage rate subsidy", Institute for Research on Poverty, Special Report 16A, University of Wisconsin-Madison.
- BISHOP, John and Robert HAVEMAN (1978), "Targeted employment subsidies: issues of structure and design", Institute for Research on Poverty, Special Report 24, University of Wisconsin-Madison.
- BURKHAUSER, Richard and Andrew GLENN (1993), "Public policies for the working poor: the earned income tax credit versus minimum wage legislation", Maxwell School, Syracuse University, Syracuse, NY, mimeo.
- CITRO, Constance F. and Eric A. HANUSHEK, eds. (1991), *Improving Information for Social Policy Decisions: The Uses of Microsimulation Modeling*, Vol. I: Review and Recommendations, Washington, DC, National Academy Press.
- DICKERT, Stacy, Scott HOUSER and John Karl SCHOLZ (1995), "The earned income tax credit and transfer programs: a study of labour market and program participation", in *Tax Policy and the Economy*, ed. James M. Poterba, Vol. 9, pp. 1-50, Cambridge, Mass., National Bureau of Economic Research and the MIT Press.
- HAVEMAN, Robert and John BISHOP (1979), "Selective employment subsidies: can Okun's Law be repealed?", *American Economic Review* 69, May, pp. 124-130.
- HAVEMAN, Robert and John PALMER, eds. (1982), *Jobs for Disadvantaged Workers: The Economics of Employment Subsidies*, Washington, DC, Brookings Institution.
- HAVEMAN, Robert (1988), *Starting Even: An Equal Opportunity Program to Combat the Nation's New Poverty*, New York, Simon and Schuster.
- KEELEY, M.C., Philip ROBINS, Robert SPIEGELMAN and Richard WEST (1978), "The estimation of labour supply models using experimental data", *American Economic Review* 68, pp. 873-887.
- LAYARD, Richard, Stephen NICKELL and Richard JACKMAN (1991), *Unemployment: Macroeconomic Performance and the Labour Market*, Oxford, Oxford University Press.

- MORTENSON, Dale (1994), "Reducing supply-side disincentives to job creation", in *Reducing Unemployment: Current Issues and Policy Options*, Symposium sponsored by the Federal Reserve Bank of Kansas City, Kansas City, Federal Reserve Bank.
- PALMER, John, ed. (1978), *Creating Jobs: Public Employment Programmes and Wage Subsidies*, Washington, DC, Brookings Institution.
- PERLOFF, Jeffrey M. and Michael WACHTER (1979), "The new jobs tax credit: an evaluation of the 1977-78 wage subsidy program", *American Economic Review* 69, May, pp. 173- 179.
- PHELPS, Edmund S. (1994a), "Low-Wage Employment Subsidies versus the Welfare State", *American Economic Review* 84, May, pp. 54-58.
- PHELPS, Edmund S. (1994b), *Structural Slumps: The Modern Equilibrium Theory of Unemployment, Interest, and Assets*, Cambridge, Mass., Harvard University Press.
- PHELPS, Edmund S. (1995), "The structuralist theory of employment", *American Economic Review* 85, May, pp. 226-231.
- OECD (1993), *Employment Outlook 1993*, Chapter 2, Paris.
- OECD (1994), *The OECD Jobs Study: Evidence and Explanations*, Paris.
- SCHOLZ, John Karl (1994), "The earned income tax credit: participation, compliance, and antipoverty effectiveness", *National Tax Journal* 47, March, pp. 59-81.
- SCHOLZ, John Karl (1995), "Testimony before the committee on ways and means, U.S. Congress", 15 June, mimeo.