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Reducing Poverty while  
Increasing Employment: A  
Primer on Alternative  
Strategies, and a Blueprint

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**THE OECD JOBS STUDY  
WORKING PAPER SERIES**

**NO.7**

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

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**ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

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## THE OECD JOBS STUDY: WORKING PAPER SERIES

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## SUMMARY

Policy to reduce poverty has often foundered on the issue of work incentives. The issue 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 labor to the market, or to exercise initiative. This conflict is also known as the "poverty trap"--with income transfer (welfare) programs in place, those with low earned income have a reduced incentive to seek and accept employment, and as a result appear trapped in poverty.

This paper discusses the primary policy strategies for reducing poverty while maintaining work incentives that have been analyzed in the literature. These strategies have been presented in a context in which a structure of income support policies and labor market constraints already exists. Existing policies typically have two characteristics: they are categorical and piecemeal in their coverage, and they contain serious work disincentives. Hence the proposed policy strategies seek to both increase the comprehensiveness and uniformity of program coverage, and to improve the structure of work incentives.

Section I describes in general terms the policy setting in which the discussion of alternative strategies is nested. Section II identifies these policy strategies, and presents prototypical plans that embody these strategies. Section III identifies some of the primary pros and cons of these prototypical plans, and in some cases discusses their cost and labor supply implications. The final section presents a blueprint for a policy program that is comprised of the strategies that have been discussed in previous sections, designed to mitigate some of the negative economic effects of the existing structure of welfare state and labor market policies in several OECD countries.

# **RÉDUIRE LA PAUVRETÉ ET ACCROÎTRE L'EMPLOI : CONSIDÉRATIONS DE BASE ET PROJETS SUR LES STRATEGIES ALTERNATIVES**

## **RÉSUMÉ**

Les politiques visant à réduire la pauvreté ont souvent échouées à cause du besoin de ne pas diminuer les incitations à travailler. Il s'agit d'une illustration de la tension classique entre l'équité et l'efficacité car la redistribution des revenus à partir des plus aisés en faveur de ceux plus modestes réduit les incitations aux deux groupes d'offrir leur main d'oeuvre ou de prendre des initiatives. Cette situation est souvent identifiée par le terme de "piège de la pauvreté" car la mise en place de mesures de transfert des revenus réduit les incitations à ceux dont les gains salariaux sont peu importants de rechercher un emploi et d'y rester avec la conséquence qu'ils paraissent figés dans la misère.

L'étude considère les différentes stratégies de base mise en avant dans la littérature visant à réduire la pauvreté tout en préservant les incitations au travail. Ces stratégies sont présentées dans le cadre d'un système de soutien des revenus accompagné des contraintes du marché du travail. Les mesures en place ont habituellement deux caractéristiques : leur couverture est incomplète et elles s'adressent à des groupes cibles, et elles entraînent des effets négatifs importants sur les incitations au travail. Par conséquent les stratégies proposées visent à améliorer la couverture des mesures tout en accentuant les incitations au travail.

La première partie décrit les grandes lignes de l'orientation des politiques entourant la considération des différentes stratégies. La partie II identifie les stratégies politiques et les présente en termes de projets typiques. Dans la partie III les principaux avantages et inconvénients de ces projets sont examinés, avec quelques considérations sur les implications quant aux coûts et à l'offre de main d'oeuvre. La dernière partie propose une esquisse d'un ensemble de politiques incorporant les stratégies déjà présentées dans le but de réduire les effets économiques négatifs de l'actuelle structure des politiques d'assistance et du marché du travail telle qu'elle se trouve dans certains pays de l'OCDE.

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## I. THE POLICY SETTING

A large and financially costly social welfare system is in place in the larger and more industrialized OECD economies. While the details of these systems differ over the countries, the following characteristics are common to all or nearly all of them:<sup>1</sup>

- An *unemployment benefit program* exists to replace earnings losses due to the involuntary separation of a worker from a job. These programs tend to replace a substantial proportion of the earnings losses--from 40 to 80 percent. Moreover, in many countries unemployment benefits can be received for a long period of time, often a year or more. In some countries, the expiration of unemployment benefit eligibility triggers eligibility for an alternative benefit program, such as disability benefits.
- A *disability benefits program* is in place to provide earnings replacement to workers who become handicapped during their working years, either on or off the job. These programs again replace a substantial proportion of lost earnings, and 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 pension. The replacement of earnings in early retirement schemes is typically less than if retirement is at the normal retirement age, but in several countries the replacement rate extends up to 70 percent after age 60.
- All of the countries have a *safety-net welfare system* in place which provides coverage to working-age individuals and families headed by such individuals. Benefit levels in these programs range widely across the countries, and in some cases vary significantly across various regions within a country. Many OECD countries have welfare program benefit levels that assure recipients of an income level around one-third to one-half of the median income level in the country.
- Many countries have a *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 school leavers without work experience, as well as to individuals receiving unemployment or disability benefits, who as a result of impairments or absence from the job may have reduced employment credentials.
- 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.

The economic effect of the current set of policies in force in most of the countries is distinctly negative in terms of employment and productivity. While providing income support to individuals and families not working, and above-productivity wages to some who are working, the net effect of the system is to:

- reduce the demand for labor (especially low-wage, low-skill labor), and encourage the substitution of temporary employees for permanent workers. The latter effect reduces the level of job training 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, 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 open economies such as characterize many of the OECD countries, these costs reduce the foreign markets for the goods and services produced.
- create rigidities in the labor market, keeping wage rates from equilibrating and labor 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 alternative available income support from public transfer programs is generous.

These negative economic effects are viewed by many as prejudicing the rate of productivity growth, inhibiting employment growth, increasing unemployment of low-wage, low-experience, and low-skill workers, reducing the rate of economic growth, and creating a low-income trap for many individuals and families who receive income support benefits. It is into this context that proposals for reform of welfare state policies designed to overcome the poverty trap are made.

## **II. SIX POLICY STRATEGIES DESIGNED TO INCREASE EMPLOYMENT AND REDUCE THE POVERTY TRAP**

This section describes briefly six policy approaches that are designed to improve the efficiency of the system of income support policies and labor market policies described in Section I. 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 Earned Income Tax Credit (EITC) or Earnings Supplement (ES), and the Basic Income Guarantee (BIG). The remaining two programs are more directly labor market programs, though both have the objective of increasing the net earned income of low wage workers. In each case, the policy proposed would substitute for some or all of the existing programs in place. My discussion of what policies would be changed in structure, reduced in size, or eliminated if one or another of these programs is enacted is abbreviated, as the circumstances would vary substantially across the countries.

### **Four income support strategies<sup>2</sup>**

#### ***a) The Credit Income Tax (CIT)***

A "credit income tax" is also known as a "universal refundable tax credit." It is viewed as a fully integrated and universal tax and transfer system in its own right, and would substitute for both existing income support programs and the existing structure of the personal income tax. As the most comprehensive system, a credit income tax is likely to achieve the goals of adequacy and equity while substantially improving work incentives.

This program 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.



The benefit reduction rate in a credit income tax program (the rate at which the grant or credit received falls as other income increases) is the tax rate that would apply at the very low end of the income tax schedule, and hence would probably be the lowest marginal tax rate in the system.<sup>3</sup> Income would be defined as whatever is in the tax base, and consequently the breakeven 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.<sup>4</sup> Because a credit income tax could be substituted for a wide variety of existing welfare and income support programs in most OECD countries, calculations suggest that marginal tax rates throughout the income range would be lower than those now faced by either net taxpayers or net transfer beneficiaries.

#### ***b) The Basic Income Guarantee (BIG)***

In Basic Income Guaranteed schemes, each person would receive a basic benefit (or refundable tax credit) which is unrelated to any other sources of income; in most such programs there are only a few categories on which the basic grant would be differentiated (perhaps, age, health status, or being a single parent, but not employment or earnings status). The transfer benefits provided under the scheme could be either taxable (and, hence, partially clawed back) or not taxable.

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 programs or the scaling down of the benefits provided in these programs.<sup>5</sup>

The income tax system with a BIG program in effect would apply the marginal tax rates implicit in the system to all earned or other income. If the BIG program was integrated with the income tax system, and a constant marginal income tax rate was applied to all income, the uniform marginal tax rate would have to be relatively high in most OECD countries, due to the high level of the social minimum income in many of these countries. If the BIG program were administered through the tax system via the awarding of refundable tax credits, a BIG program would simply be a high guarantee variant of a credit income tax.

One means of reducing the marginal rate on middle and upper income families would be to apply a very high marginal tax rate to the income of families with low earnings or other income (and, hence, whose net BIG credits would be substantial). At the limit, the marginal tax rate applicable to such families could be 100 percent, in which case the classic "poverty trap" would be in place for all low income families.

#### ***c) A Universal Negative Income Tax (NIT)***

A negative income tax is also similar in principal to a credit income tax. However, were a negative income tax enacted, the existing income tax structure need not be drastically altered. 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 breakeven 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. As a result, the marginal tax rate faced by a low income individual or family under a negative income tax would be higher than that faced by the same family were a credit income tax be in effect. In addition, the breakeven income level would be lower in a negative income tax than in a credit income tax, and the number of families or individuals covered by the program would be smaller.<sup>6</sup>

Like a credit income tax, a negative income tax would be a means for consolidating all income support programs targeted at the poor into a single program, hence eliminating incentive and poverty trap problems created by multiple program reciprocity and the associated high marginal tax (benefit reduction)

rates. Such consolidation would also eliminate the categorical nature of a system composed of a variety of separate income transfer programs (e.g., unemployment benefits, disability benefits, basic welfare), along with the stigma effects often associated with categorical programs. Such consolidation, however, would imply reduced benefit levels for some current benefit recipients.

**d) 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) would be paid a percentage of his/her earnings as a supplement, up to some specified level of earnings (called the "kink point"). For example, the supplement might be 20 percent of earnings up to the kink point, so that if the worker earned, say, \$10,000 and this earnings level is below the kink point, the worker would receive another \$2000 as a supplement.

While the negative (or credit) income tax has a marginal tax rate associated with it, hence creating work disincentives contributing to a poverty trap, the earnings supplement has a marginal *benefit* rate for those whose earnings lie below the kink point, providing positive incentives for such low income individuals to increase their labor supply and work effort.

However, because it is not possible (or desirable) to supplement the earnings of all workers, the supplement paid is eroded at earnings levels above the kink point through the application of an implicit marginal tax rate imposed on earnings increases above this kink. This erosion of the supplement is similar to the "take back" of the basic income level in a negative income tax, and imposes the same form of work disincentives. And, like the negative and credit income tax, the earnings supplement has a breakeven earnings level, beyond which point participation in the program ceases.

Hence, an earnings supplement program can be divided into two parts: the marginal subsidy 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). As a result of these two parts, an earnings supplement may have positive work incentives for some low earnings individuals and families (those whose earnings are in the marginal subsidy part of the schedule), and adverse incentives for others (those whose earnings are in the marginal tax part, where the level of supplement is subject to a marginal tax rate).

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. Hence, it provides a strong incentive to enter the labor market, and conversely a disincentive for labor force withdrawal. It provides both the incentive and financial support for working to escape the poverty trap, but if the poverty line lies above the kink point the incentive ceases prior to a full escape.<sup>7</sup>

**Two labor market strategies**

**a) A wage rate subsidy**

Like an earnings supplement, a wage rate subsidy is a work-conditioned income support program. By augmenting the worker's hourly wage, a greater supplement or subsidy is provided the more hours that an individual works. And, like the earnings supplement, no support is provided if no market work is done.

A wage rate subsidy program rests on the establishment of a target wage rate which is socially determined. Then, 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 .5, a worker earning \$5.00 per hour would receive a subsidy of \$1.50 per hour worked (\$1.50 is .5 of the difference between the target wage rate of \$8.00 per hour and the actual \$5.00 per hour wage).

A wage rate subsidy, therefore, increases the income of low wage workers via increasing the "take home" wage rate of the worker. From the worker's perspective, his/her job appears to pay \$6.50 per hour, as compared to the employer's cost of \$5.00 per hour. The more hours worked by the worker, the greater the income support received. As a result, the wage rate subsidy carries with it a strong work incentive. For those workers able to gain employment, a wage rate subsidy is an effective policy for avoiding the poverty trap. As compared to, say, a negative income tax, a wage rate subsidy supplements earnings from additional work, rather than taxes them. However, like the earnings supplement it provides no "safety net" benefit for families without a worker.

#### ***b) Employer-based marginal employment subsidies***

Like the wage rate subsidy an employer-based employment 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-skill labor suppliers--increasing the attractiveness of working relative to its alternatives--employment subsidies offered to enterprises operate on the demand side of the market. They seek to make the hiring of low-skill workers relatively more attractive than without the subsidy, hence increasing the demand for such workers. The key here is to change the "terms of trade" to employers when they are forced to choose factor combinations in meeting the production requirements caused by increases in the demands for their goods and services--to make low-skill labor inputs per unit of cost relatively more attractive than other labor inputs or capital inputs, per unit of cost. To be effective such supplements must affect the decisions of employers as they are hiring factors of production; the subsidies must be marginal in nature, a point that we shall return to later.

One possible form of employment subsidy targeted on enterprises was that in effect in the United States in the late 1970s--the New Jobs Tax Credit (NJTC). Here is how it worked: The federal government provided a tax credit to any enterprise equal to 50 percent of the first \$6000 of wages paid to the 50 workers hired in a firm above 102 percent of the firm's previous year's employment. 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 low-skilled wages than it is for more skilled workers. For example, a newly hired worker who is paid \$10,000 per year would generate a supplement to the employer equal to \$3000, or 30 percent of the employer's costs. However, if a \$20,000 worker were hired, the same \$3000 supplement would represent only 15 percent of the employer's costs.

The design of such a program could modify these provisions in several dimensions. For example, the subsidy rate could be increased to more than 50 percent, which would provide a greater incentive for hiring labor relative to other inputs (while of course increasing costs). The base level of wages that are subsidized 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 program takes effect (the 102 percent of last year's employment in the above example) could be reduced to, say, 100 percent, providing employers a subsidy on any workers hired beyond last year's level.

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 through directly changing the structure of the labor market. Income support would come from working and earning, the demand for which would be stimulated by such a program.

### III. PROS AND CONS OF THE SIX POLICY STRATEGIES

One of the laws of social policy change is that any reform carries with it both costs and benefits; no change has unchallenged benefits. This section discusses the merits and the disadvantages of each of the six strategies outlined in Section II, and attempts to characterize the overall labor supply and cost implications of the schemes. An Appendix to the paper summarizes some of the important characteristics of the income support policies, and provides a diagrammatic description of the benefit structure of each.

#### a) *Merits and disadvantages of a credit income tax*

In the following discussion, it is assumed that the credit income tax plan under consideration has the following characteristics: 1) the credits are awarded according to some scaling formula to all members of a family (hence, the plan is family-size conditioned), 2) the credits are refundable to families with earnings or income below the breakeven point, 3) the income guarantee is about two-thirds of a poverty line which is itself about one-half of median income (hence, the income guarantee is about one-third of median income), 4) a constant marginal tax rate of, say, 30-40 percent would apply at all income levels (except, perhaps, at the highest income levels), and 5) all other income support programs for working-age people would be eliminated.<sup>8</sup>

A credit income plan with these characteristics has a number of *desirable features* in terms of its likely effectiveness in reducing the poverty trap and mitigating the disincentives for work implicit in the structures of most social welfare systems of 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 credit income tax would increase the burden on the existing tax authority, the basic auditing and monitoring activities now practiced would simply be extended. This administrative burden would be very small compared to the enormous administrative costs of the income support policies now in effect in most OECD countries.
- Under a unified tax-and-transfer system such as a credit income tax, there would be no identifiable population that would be known as "welfare recipients," and who would thereby feel stigmatized; such a system could thereby be more socially cohesive than the existing categorical systems in many nations.
- A credit income tax 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 credit income tax 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 program would, by definition, eliminate poverty.
- Perhaps most important, a credit income tax would substantially improve the work incentives for individuals and families with low wages, low skills, and high rates of nonemployment. A credit income tax plan with the characteristics described above would have a flat rate tax that could be expected to be in the 30-40 percent range, indicating that beneficiaries would experience a sizable 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* of a credit income tax, including:

- Adoption of a credit income tax 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 probably modified. While income tax systems in most OECD countries are rife with special exemptions, deductions, specialized credits, and allowances, a comprehensive tax base is presumed here, as it is in most discussions of credit income tax plans. The need for such fundamental tax reforms could pose substantial obstacles to the institution of a credit income tax program.
- Relative to existing welfare programs, the credit income tax may be less "target efficient." Whereas existing programs are often effective in transferring income to special groups of interest (e. g., the disabled or the unemployed), a credit income tax is a more general income support program which would likely have individuals and families above the poverty line receiving income support.
- Unlike existing social income support programs in most OECD countries, the credit income tax does not naturally provide income transfers to individuals and families on a timely basis. When a worker becomes unemployed, 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 credit income tax structure.
- A credit income tax is ideally designed to set a modest base level of living below which no individual or family will fall. Such an objective is inconsistent with the very high benefit levels and effective income guarantees now available in some OECD countries (e.g., income replacement rates in unemployment and disability insurance programs of 75-80 percent). Were the income guarantee level of a credit income tax to be set at levels sufficiently high to allow substitution of such a program for existing income support programs 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 percent. Universal marginal income tax rates of this magnitude are likely to be unacceptable in most nations.

It should be noted that if a credit income tax of the dimensions of that suggested above (i. e., with a guaranteed minimum income of about one-third of median income) were to be considered, and if it were decided that particular categories of people such as the unemployed or the disabled were to be supported at wage replacement rates of 65-75 percent, separate programs for the special categories of workers could be designed to build additional benefits on top of those available in the credit income tax. Such supplementation, however, would entail higher marginal tax rates in the credit income tax program than those described above, unless alternative revenue sources were available to finance these additional benefits.

### **Program costs and labor supply effects**

It is difficult to provide a definition of program costs for such a unified tax-transfer program. Introduction of such a scheme generates reductions in expenditures from the elimination of those income support programs 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 programs, increases in tax revenues from some taxpayers due to expansion of the tax base, and, perhaps, decreases in tax revenues from some taxpayers due to imposition of lower marginal tax rates at higher income levels. Moreover, such a program may need to be supplemented by auxiliary programs designed to maintain existing wage replacement levels for unemployed or disabled workers, and the additional expenditures from these supplemental programs must also be considered. An estimation of the effect on net 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. A credit income tax program 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 programs for special groups of workers such as the unemployed or disabled.

A rough sense of the net revenue effects of introduction of a credit income tax is provided by a simulation study done for the United States a few years ago.<sup>9</sup> In this study, a credit income tax with a guarantee level equal to about 75 percent of the United States' poverty line (about 35-40 percent of median family income) was analyzed. This scheme was a substitute for the existing income tax, and it was accompanied by elimination of existing welfare programs, 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 itemized deductions, and to include Social Security and Unemployment benefits as taxable income. The unemployment compensation and disability benefit programs were assumed to remain unchanged. To be revenue neutral (that is, the effect of the program on public net revenues would be zero), a marginal tax rate of 34 percent was imposed uniformly on all taxpaying units.

As expected, the plan transferred substantial income from higher to lower income families, reduced the poverty rate (from about 21 percent to about 13 percent, and substituted a marginal tax rate of 34 percent for the very high tax rates imposed on welfare recipients (the poverty trap) and high income taxpayers. This study also estimated the labor supply effects from introducing the credit income tax, together with the other changes in transfer programs and the income tax. The information used to predict adjustment in work hours and earnings was based on statistical estimates of labor supply parameters from the Seattle-Denver Income Maintenance Experiment--the largest and most reliable of the United States' experiments. The study found that low income persons as a group would reduce their work effort because of 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 labor 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 percent for lower income families, but increases of about 5 percent for higher income, net taxpaying families. On balance, the total years of labor supply was estimated to *increase* by slightly less than one percent because of the scheme. Total earnings in the economy were estimated to increase by about 1.8 percent, a greater percentage increase than that for labor supply because the work effort increases were concentrated on the highest wage families.

#### ***b) Merits and disadvantages of a basic income guarantee program***

As discussed above, most discussions of BIG schemes envision an income guarantee set at the level of an acceptable social minimum. Hence, the income guarantee in such a plan would be set equal to, say, the level of the nation's poverty line. Two forms of BIG plan 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 credit income tax (CIT). The effective level of the credits (or guarantee) provided in the BIG plans typically exceeds that considered in discussions of the typical credit income tax. Although the implications of the plan for the income tax structure are seldom spelled out in BIG proposals, a common presumption is that all (or most) tax allowances would be eliminated if the plan went into effect; 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 credit income tax 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 program 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 which approaches the social minimum income level, a BIG program 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 credit income tax plans most commonly discussed, BIG plans are more "adequate" 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 that offer universal coverage, the high level of the BIG guarantee requires that high marginal tax rates--at least 50 percent--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.

No simulation studies of the sort discussed above for the credit income tax plans have been done for BIG proposals. Extrapolating from the results discussed above, it is clear that the income redistribution and poverty reduction resulting from a BIG plan would be substantially greater than that of a credit income tax, 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 suggests that the aggregate reduction in labor supply would be greater than for the credit income tax plans. However, it would be difficult to estimate if the reduction in labor supply from substituting a BIG plan for existing income support systems in OECD countries would increase or decrease aggregate labor supply.

### *c) Merits and disadvantages of a negative income tax*

As indicated in Section II, a negative income tax and a credit income tax have much in common, especially in terms of the transfer side of the program. Hence, the comments here serve only to supplement those offered in the discussion of the credit income tax.

Because a negative income tax 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. While this may increase the target efficiency of the program 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 (say, .67 or .7) if the provision of benefits is not to extend well up into the income distribution. These higher tax rates reduce the effectiveness of the program in inducing additional work effort, and mitigating the effect of the poverty trap.

Moreover, 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 those covered by the negative income tax would have to deal with the separate administrative agency, it is possible that stigmatization of this group would occur.

### **Program costs and labor supply effects**

As in the discussion of the CIT, it is difficult to provide a definition of program costs for such a program. Again, introduction of the scheme would generate reductions in expenditures from the elimination of those income support programs for working-age people for which it substitutes, increases in expenditures (through the guaranteed level of income support at zero income) for low-wage working people not covered by existing income support programs, increases in tax revenues from some taxpayers due to expansion of the tax base, and, perhaps, decreases in tax revenues from some taxpayers due to imposition of lower marginal tax rates at higher income levels. Unlike most discussions of CIT plans, NIT arrangements are less likely to require supplementation by auxiliary programs targeted on unemployed or

disabled workers. However, the costs of whatever supplemental programs are adopted must also be considered. Again, estimation of the effect on net revenue from all of these changes (and others as well) would need to be considered.

The study called on above in providing crude estimates of the net revenue effects of a credit income tax can be employed again.<sup>10</sup> In this study, a negative income tax with a guarantee level equal to about 75 percent of the United States' poverty line (about 35-40 percent of median family income) was also evaluated. (This guarantee of income was the same as the credit income tax discussed above.) The NIT plan was viewed as a substitute for a variety of existing income support policies (Aid to Families with Dependent Children, Food Stamps, Supplemental Security Income, and General Assistance), although the unemployment benefits and disability programs were left intact. The program was not considered a part of the income tax; in effect, the NIT became a universal income transfer program to low income families, thereby avoiding the administrative complexities and gaps in coverage of existing categorical programs. For all families receiving net transfer benefits, a benefit reduction rate of .5 is imposed; all other forms of income are taxed at a rate of 50 percent.

As with the CIT discussed above, the tax base is expanded to disallow most itemized deductions, and to include Social Security and Unemployment benefits as taxable income. To be revenue neutral, a marginal tax rate of 23 percent had to be imposed on all households not eligible for transfer payments.

As with the CIT, the NIT transferred substantial income from higher to lower income families, and reduced the poverty rate (from about 21 percent to about 16 percent). The NIT substituted a marginal tax rate of 50 percent for the very high tax rates imposed on welfare recipients in the existing system (the poverty trap). The tax system simulated was of a "flat rate" type, and raised marginal tax rates on near-poor and middle income families while substantially reducing them for high income taxpayers. This study also estimated the labor supply effects from introducing the NIT (together with the other changes in transfer programs and the income tax) using labor supply response parameters from an income support experiment. The study found that low income persons as a group would reduce their work effort because of introduction of the NIT; this result is due to the substantial increase in income transfers to the poor in combination with the large income effect parameters used in the analysis. 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 6 percent for the very lowest income families, increases of about 2 percent for middle and upper income, net taxpaying families, but a labor supply reduction of about 8 percent on the very highest income class. On balance, total labor supply was estimated to *increase* by only .3 of one percent because of the scheme. Total earnings in the economy were estimated to increase by less than one-half of one percent (as compared to 1.8 percent in the simulated CIT).

#### ***d) Merits and disadvantages of an earnings supplement***

As indicated in Section II, an earnings supplement provides income support to individuals and families only through the work they do, and their earnings. Hence, its main advantage is its emphasis on the incentive to participate in the labor market--to work and to earn. As such, it substantially reduces the "poverty trap" effects that characterize many existing income support programs. In addition to this, an earnings supplement:

- will provide a positive subsidy rate to earned income for those with very low earnings levels, hence providing a substantial incentive for work for these individuals and families.
- conversely, for low-wage earners whose earnings levels are beyond the "kink point," a marginal tax or benefit reduction rate will be imposed. The work disincentive that this entails is small relative to the implicit tax rates in many programs that now comprise the tax-transfer



system in many OECD countries, but it is nonetheless a disincentive for supplying labor to the market.

- it is relatively simple to administer because it requires only information on earnings; indeed, like the earned income tax credit in the United States, an effective earnings supplement program could be incorporated directly into the income tax structure.

Relative to alternative strategies, an earnings supplement (like all work-conditioned approaches) does not set an income floor under individuals and families. Hence, it does not serve to reduce poverty for the very lowest income people, or those who have limited ability to work and earn. As such, it can supplement alternative approaches in an effort to provide adequate income support while reducing both work disincentives and the "poverty trap". However, it cannot accomplish this task alone.

### **Program costs and labor supply effects**

While a good deal of evidence on program costs is available, there is little reliable evidence of the labor supply effects of an earnings supplement. The following discussion draws upon recent analyses of the Earned Income Tax Credit in the United States, which has been substantially expanded by legislation passed in 1993.<sup>11</sup> The plan that is discussed is that legislated to be in effect in 1996 in the United States.

The 1996 EITC will provide transfer benefits to nearly 13 million American families, with benefits paid costing 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 subsidized at a rate of 36 percent up to nearly \$8500 of earnings--implying a maximum earnings supplement of over \$3000. At \$11,000, the phaseout of the \$3000 supplement begins, and the implicit tax rate of the phaseout is about 20 percent. 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.

Clearly, the EITC has strong work incentives for lower income families--especially those experiencing the "negative" marginal tax rate of 36 percent. 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. No simulation or experimental evidence is available on the overall effects of an earnings supplement on labor supply. Scholz (1993) summarized the labor supply effects of the United States EITC as follows:

"The EITC has different labor supply effects depending on whether the taxpayer's income is in the subsidy, flat, or phase-out range of the credit. The subsidy range of the credit works as a wage subsidy, increasing the worker's marginal return to labor. For taxpayers with no earned income, the substitution effect associated with higher wages will provide an unambiguous incentive to increase labor supply. For taxpayers with incomes in the subsidy range, the substitution effect will increase labor supply, whereas the income effect will decrease labor supply. The net effect is ambiguous. There is only an income effect in the flat range of the credit, which provides an unambiguous incentive to reduce labor supply. In the phase-out range, the substitution and income effects work in the same direction to decrease labor supply. These effects prompt the concern that if a disproportionate fraction of the EITC population is in the flat and phase-out ranges of the credit, increases in the EITC could lead to a net reduction on the labor supplied by low-income workers."

Scholz estimates that with the 1996 EITC, 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.

#### ***e) Merits and disadvantages of a wage rate subsidy***

By augmenting the hourly wage of low-wage workers, the wage rate subsidy contributes to poverty reduction among this population. Simultaneously, it provides incentive for additional labor supply, offsetting the tendency of standard income support programs 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 subsidy.<sup>12</sup> These three unambiguous effects are its primary merits.

However, perhaps more than other anti-poverty 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 programs:

- tend to erode the market wage of low wage workers through inducing an increase in the supply of labor in response to the higher "take home pay." In part, this bidding down of market wage rates is what gives this policy its potentially large effect on employment. With lower market wages, low skill workers become more attractive to many employers.<sup>13</sup>
- simultaneously reduce the benefits to a low-skill 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 labor supply and hours worked.
- tend to create incentives for workers to underreport wage rates, to overreport the number of hours worked, and to engage in nonreported 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.
- requires substantially different information for its 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.<sup>14</sup>
- provides 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 will be lower than that of a credit income tax or a negative income tax.<sup>15</sup>

#### ***f) Merits and disadvantages of an employer-based marginal employment subsidy***

Unlike the policies discussed above, an employer-based subsidy designed to increase the employment of low-skill 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 favor of low-skill workers. As a result, the wage rates of lower skilled workers tend to be bid up, and more low-skill workers are able to find work. As with the wage rate subsidy, the workings of the market in response to the program lead to increased employment and reduced poverty for low-skill workers. By operating on the demand side of the labor market, such subsidies tend to offset the adverse effect of the minimum wage, thereby reducing the effect of existing income support programs in creating a poverty trap.

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 program 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.<sup>16</sup>
- the target effectiveness of an employer-based subsidy needs to be carefully considered in its design. The program 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 labor force, in order to maximize the amount of the subsidy that they receive.<sup>17</sup> The design of such a program must insure that such cycling or churning behavior is minimized.

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

#### **IV. THE OUTLINES OF AN EMPLOYMENT-CENTERED SOCIAL POLICY REFORM**

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

*No single policy is capable of assuring both adequate income support to those without sufficient earnings (i.e., poverty reduction) and stimulating an increase in the employment of low-skill workers. The "iron law" of income support needs to be emphasized again: 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 the work disincentives.*

Consistent with this proposition, the credit income tax and the negative income tax could be effective instruments for: 1) providing a minimum income floor below which no individual or family would fall, and 2) 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-skill workers, and hence, on their overall employment levels.

Conversely, the work-conditioned policies that we have discussed--earnings supplements, wage rate subsidies, and employer-based marginal employment subsidies--were seen to be capable of: 1) increasing the positive returns to labor supply and work, 2) increasing the effective demand for the services of low-skill workers, and 3) 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 labor supply of low-skill workers, and
- stimulate the demand of private and public employers for the services of low-skill workers.

This section sketches out a possible combination of income support and labor market reform policies that would contribute to simultaneously securing these goals.<sup>18</sup> This program of policy changes would consist of the following components:

1. *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 programs (see below), and would simultaneously: 1) reduce the incentives for early retirement, and 2) increase the incentive for private saving to support retirement in later years.

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

The elimination or scaling back of these programs would also free up budgetary resources to support the new programs, and would eliminate those aspects of the social welfare systems in many OECD countries responsible for high work disincentives and the "poverty trap."

3. *Establishment of a credit income tax program*

In this program, 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 program would be integrated with the positive income tax, so as to yield a smooth marginal tax rate pattern.

As a result of this component of the plan, "hard-core" poverty would be eliminated, as the bottom tail of the nation's income distribution would be cut off. This component would decrease the severe work disincentives created by the existing high benefit-reduction rates implicit in the income support programs of most OECD nations. It would also strip away the complexity of the mesh of current programs, and eliminate much of the stigma associated with welfare programs. With a credit income tax integrated with the standard income tax structure, incomes would be taxed and support provided in a simple, open, universal, and just manner.

4. *A two-pronged employment subsidy program for low-skill 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 characterized by low skill and education levels--face relatively bleak labor market opportunities. These disadvantaged workers are confronted by a structural employment problem. Their lack of prospects coexists with attractive employment prospects for other groups.

The most basic reason for this situation 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 the distorting effects of the combination of minimum wage laws, union wage contracts, and the fringe benefits and payroll taxes that business are required to pay for every standard worker. These constraints contribute to the labor 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-skill workers a more profitable and attractive proposition than it is now. Both prongs of the policy are designed to offset constraints on labor demand from market rigidities, and increase the employment of less skilled workers. Business costs would tend to fall, while output would tend to increase.

*a) An employer-based marginal employment subsidy*

This prong of the program would be designed in line with the description above, and would provide financial incentives to employers who hire low-skill workers over and above the amounts that they would otherwise hire. Hence, the subsidy would be marginal in nature, effecting the decisions of firms regarding both the level of inputs to hire and their composition.

While such a program has been effectively employed in 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.<sup>19</sup>

*b) A wage rate subsidy*

The second prong of this program focuses on the low-skill workers themselves. An employee-based subsidy program 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 subsidized by the government, giving the worker a labor market advantage, and hence an incentive to seek work. Workers would be encouraged to exercise job-seeking initiatives on their own behalf; the program is oriented to the supply side of the labor market for low-skill workers.

The new labor 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 labor market with the most severe unemployment problems, and the greatest susceptibility to "poverty trap" problems created by existing tax and transfer programs, output could be increased without significant inflationary pressure.

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

**Program costs and labor supply effects**

Clearly, the changes in program structure and coverage of the type and magnitude of those suggested by this constellation of proposals will alter both the supply of, and demand for, low wage labor, as well as the operation of labor 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 would be impossible. However, some rough notion of the magnitude of budgetary costs and labor supply impacts seems possible.

Start, for example, with the credit income tax, set at one-half to two-thirds of the poverty line. Drawing from the simulation study for United States reforms discussed above<sup>20</sup>, a plan of this sort (accompanied, it will be recalled, by the elimination of existing welfare programs) would transfer from \$25-30 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 percent should no other changes occur. However, because a credit income tax also implies a reform of the personal income tax structure, with a broadening of the tax base 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 program alone substantially increases the work incentives for low income people who are currently recipients of welfare benefits, although the possibly higher taxes required of upper income families will 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 program (described above) has been evaluated as having a substantial impact on the labor demand for low skill workers. The subsidy was paid on nearly 1 percent of the labor force, at a cost to the Federal government of \$2 billion. This would translate into a \$10-15 billion dollar program today, especially if supported by publicity and a commitment to reduce bureaucratic difficulties. Clearly, the net drain on the Treasury would be smaller if the increased labor demand expected from such a program did indeed lead to substantial additional employment (and tax payments) for low wage workers.

Finally, consider the wage rate subsidy. Several years ago the costs of a wage rate subsidy which paid a subsidy equal to 50 percent of the difference between the actual wage rate and about \$10 per hour (in 1993 dollars) were estimated using a simulation model.<sup>21</sup> In current dollars, this estimate suggested that such a wage rate subsidy made available to all heads of families with children would entail a budget cost of, roughly, \$5-10 billion. Because such a program increases the incentive of low skill laborers to supply labor, work and earn, this estimate is probably an upper bound.

The entire package, then, carries a cost figure of about \$35-60 billion, less than 5 percent 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 labor market would be accomplished. The increases in both the incentive to work, and in the inducement to firms to target employment growth on low-skill workers, could lead to a sizable increase in the amount of low wage labor supplied, and in the aggregate level of employment and earnings of workers with few skills and little education. The above speculations regarding program cost, it should be noted, do not take into account the increased work and associated tax payments attributable to the program.

## **V. A FINAL NOTE ON THE DILEMMA OF SOME OECD COUNTRIES**

The above discussion is premised on the judgement that an improvement in social policy in the OECD countries requires a decrease in the disincentive to work--the poverty trap--that confronts recipients of current unemployment and disability benefit programs. The above suggestions were designed to increase work incentives and eliminate the poverty trap. Implicit in all these suggestions is the assumption that the high relative benefits paid by many of these programs (e.g., wage replacement rates of 70-80 percent) cannot serve as a measure of the socially acceptable minimum income to which an income guarantee must be tied. If it were required that a general income support program such as a credit or negative income tax set a guarantee level in this range, it is clear that in some of the member countries the marginal tax rates imposed on all earnings would be intolerably high. While the "poverty trap" would be reduced for current

benefit recipients, severe work disincentives would be imposed on the remainder of the population. Such an option is unworkable.

Two options seem possible. First, member countries desiring to eliminate the "poverty trap" and increase in work incentives and employment for low skill workers must face up to the fact that the replacement rates now in force in some programs need to be scaled back if the benefit levels in these programs are to be taken as indicators of the socially acceptable minimum income. While this is a difficult and politically dangerous posture, the "iron law" of income support policy described above indicates that high guaranteed incomes and strong work incentives are incompatible policies.

There is also a second option. Governments can indicate that the acceptable level of the income guarantee for all citizens save those included in restricted categories (e. g., the disabled or the unemployed) will be at a rather low level of, say, 30-40 percent of median income. Then, a comprehensive and universal income support system of the sort discussed above becomes financially feasible and workable. An adequate 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 programs in the special categories are not to 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 would be desirable to erode the seriousness of the "trap" by incrementally reducing the replacement rates incorporated into these programs, and restricting the eligibility criteria applied in granting access to benefits.

In sum, little progress can be made in creating a labor market environment for low skill 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 programs available for the working-age population, and hence does not discuss the work incentives implicit in the Social Security retirement programs.
2. Appendix A provides a simple diagrammatic description of the various income support programs, along with a more complete description of their characteristics.
3. As described below, in most discussions a "flat" or constant marginal tax rate is applied to earnings and other income in most discussions of a credit income tax.
4. For example, if the basic income grant for an individual was \$2000, and the marginal tax rate on other income was .2, the breakeven 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.
5. The net result of this would be that certain existing beneficiaries of income support benefits (such as unemployment benefits or disability benefits, in several OECD countries) would experience a decrease in living standards as the BIG program was introduced. This effect could be mitigated by viewing the BIG program as a base income support system that was universal over the entire population, and then adding a set of categorical benefit programs to it. Of course, additional categorical benefit programs paying high replacement rates carry with them costs and the need for tax revenue covering the costs. If this tax revenue were to be raised via the income tax, marginal tax rates on nonpoor families would have to be raised to, perhaps, substantial levels, with the work disincentives on these people that high tax rates would imply. See Section V, below.
6. Were a negative income tax ideally integrated with the income tax, the breakeven income level in the negative income tax would coincide with the income that is exempted from taxation in the positive income tax. With this arrangement, a family or individual would not be simultaneously receiving a benefit and paying taxes.
7. The earned income tax credit in the United States is a form of earnings supplement. In 1992, the supplement rate was 17.6 percent for families with one child (18.4 percent for families with more than one child), and applied to earnings below \$11,840. Beyond this level, the supplement of \$1324 (for one child; \$1384 for two children) is phased out at a rate of about 13 percent. The credit is totally phased out at an earnings level of about \$22,400. Like the British Tax Credit Plan proposed in 1972 Green Paper but never enacted, the U.S. earned income tax credit provides income support only for those low income families in the labor force.
8. The implications of supplementing a credit income tax program with programs providing special benefits for particular groups of workers currently covered by high wage replacement rates in many OECD countries are discussed below.
9. David Betson, David Greenberg, and Richard Kasten, "A Simulation Analysis of the Economic Efficiency and Distributional Effects of Alternative Program Structures: The Negative Income Tax versus the Credit Income Tax," in Irwin Garfinkel, ed., *Income-Tested Transfer Programs: The Case For and Against* (New York: Academic Press, 1982).
10. Again, see Betson, Greenberg, Richard Kasten (1982).
11. The following discussion draws upon two recent analyses of the EITC: John Karl Scholz, "The Earned Income Tax Credit: Participation, Compliance, and Antipoverty Effectiveness," Institute for Research on Poverty Discussion Paper 1020-93, 1993; and Richard Burkhauser and Andrew



Glenn, "Public Policies for the Working Poor: The Earned Income Tax Credit versus Minimum Wage Legislation," Maxwell School, Syracuse University, Syracuse, NY, mimeo, 1993.

12. Analytically, in competitive labor market, an important effect of a minimum wage policy is to reduce the demand by employers for the services of workers whose productivity is at or below the minimum required wage. As a result, while some low-skill workers benefit from a minimum wage policy, others find their employment prospects eroded. Higher unemployment of low-skill 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-skill workers that has been reduced by the minimum wage.
13. 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 noncompetitive markets for goods and services, however, there could be some financial windfall accruing to employers.
14. There are a wide variety of other administrative issues that would need to be confronted in implementing a national wage rate subsidy program. 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.
15. 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.
16. It should be noted that the New Jobs Tax Credit program of the United States (described in Section II) 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" (102 percent of last year's employment level in the New Jobs Tax Credit program) at which the subsidy would begin to be paid. If the cut-in level is set too low, employers will be subsidized 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 on part-time or part-year employees are all design issues that would need to be resolved.
17. 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.
18. It should be emphasized 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 macro-economic policies, education and training (human capital investment) programs, migration policies, relocation policies, and policies designed to relax the constraints on the operation of the labor market (e.g., minimum wage policy, employer layoff constraints, and so on).
19. The following questions illustrate some of the issues that would have to be considered in designing an effective *marginal* and *targeted* employment subsidy program:
  - What should be subsidized; time-spent-working, earnings, or time or earnings up to a specified limit?

- Should the subsidy be paid on all workers (a general employment subsidy), on all new hires (a recruitment subsidy), or on all employment increases above some base level (a marginal subsidy)?
- Should the subsidy be paid for employment provision or employment provision supplemented with job training?
- For how long should recruitment subsidies be in effect?
- Which workers should be eligible?
- Which employers should be eligible?
- Should there be a cap on the amount of subsidy a firm may get?
- How should the program be administered?

20. See Betson, Greenberg, and Kasten (1982).

21. David Betson and John Bishop, "Wage Incentive and Distributional Effects," in Robert Haveman and John Palmer, eds., *Jobs for Disadvantaged Workers: The Economics of Employment Subsidies* (Washington, D.C.: The Brookings Institution, 1982).

## APPENDIX

### Alternative Income Support Plans: A Summary

#### **Basic Income Guarantee (BIG) Plan:** (ABC or AH, in Figure 1)

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 children, paid to the children's guardian). All income (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 .5 of median income, the required marginal tax rates on all earners are high (in excess of .5 or .6). In a variant of the plan designed to reduce the work disincentives on middle and upper income workers, marginal tax rates of 100 percent on workers with earnings below the guarantee level have been suggested.

#### **Characteristics:**

- In some variants of the plan extremely high (100 percent tax rates) work disincentives are applied to the earnings of all low-wage individuals. This creates a "poverty trap."
- Work disincentives for workers are substantial in BIG plans that do not impose 100 percent marginal tax rates on low wage workers. The range is from 40-60 percent, depending on the definition of the social minimum income and the other revenue demands imposed on the income tax.
- Very effective in reducing poverty (as drawn in Figure 1, poverty is eliminated); it is very "target efficient."
- The amount of aggregate public income transfers going to the poor is very large; it depends in part on the work response of the poor to the guaranteed income and high marginal tax rates.
- Program can be designed to be paid to family units, with varying amounts paid to different size families. Or the program can be designed to provide payments to individual adults, or to adults and children.
- In most discussions of BIG programs, it is assumed that income taxes are levied on all incomes, and that the tax base is comprehensive.

***Low Guarantee Negative Income Tax (NIT) Plan:*** (DBE, in Figure 1)

A low (below .5 of the poverty line) income is guaranteed at zero earnings. A low marginal tax rate is applied to earnings of those below the poverty line and in middle and upper income groups. The plan is best viewed as a "base plan," on which other programs (e.g., wage subsidy, disability/unemployment benefits) could build.

**Characteristics:**

- The marginal tax rates on the poor will be similar to those on the near poor and the non-poor, and relatively low. The marginal tax rates in the negative range can be smoothly integrated with those in the positive tax system.
- Absolutely, the work disincentives for the poor and non-poor are low; marginal tax rates would fall in the 15-20 percent range in most OECD countries (again, being dependent on the other public sector revenue requirements). Relative to existing income support systems in these countries, this plan would greatly increase the incentive to work.
- While effective in targeting benefits on the poor, the plan is not generous and, by itself, would reduce the severity of poverty but not eliminate it. As a less generous plan, its costs would be relatively low. Relative to existing income support systems in these countries, this plan would greatly increase the incentive to work.
- While effective in targeting benefits on the poor, the plan is not generous and, by itself, would reduce the severity of poverty but not eliminate it. As a less generous plan, its costs would be relatively low. Relative to income support programs in most OECD countries, this plan would leave a larger poverty income gap.
- Additional labor market or categorical benefit programs can be easily built on top of it. The remaining gap would depend on the response of low wage workers to the improved incentives, and the supplementary programs complementing the plan.
- Program is easily integrated with the income tax system, and if so integrated, would pay benefits to households (or "tax units"). Hence, benefits would be family size conditioned.

***High Guarantee Negative Income Tax (NIT) Plan:*** (FBC or FBE, in Figure 1)

A relatively high income guarantee of about two-thirds to three-fourths of the poverty line characterizes this plan. For those with below poverty line incomes, the marginal tax rate applied to earnings would be relatively high in absolute terms; about 65 to 75 percent.

**Characteristics:**

- Higher work disincentives are - in the form of high marginal tax rates - imposed on the poor than on the near poor or the nonpoor. A "kink" in the benefit-tax schedule exists at the "break even point," B. Unlike the BIG plan, additional work and earnings by poor families would yield increased income. Substantial work disincentives exist, but not a "poverty trap."
- Relatively to many income support systems in OECD countries, this plan increases work incentives for the poor modestly; that is, it eliminates the poverty trap. While existing income support systems (often composed of several categorical programs) treat equally poor people differently, this plan (like the BIG and low guarantee NIT plans) insures equal treatment of people with equally low earnings or incomes.
- This plan is efficient in targeting benefits on the poor, and would leave a relatively small poverty income gap (perhaps about the same size gap as existing income support systems). The costs of the plan are somewhat less than the costs of existing income support systems. However, if existing systems fail to provide coverage to large numbers of poor families (e.g., the "working poor"), the budgetary costs could be larger.
- Integration of the plan with the positive income tax is feasible, but the "kink" results in an uneven pattern of marginal tax rates between poor and unpoor families. If integrated with the income tax system, the benefits could easily be conditioned on family size and structure.

### ***Credit Income Tax (CIT) Plan:***

A CIT program can be structured in the same way as any NIT or BIG plan, and hence could correspond to any of ABC, AH, DBE, FBC, or FBE in Figure 1. A key difference between NIT and CIT plans is that NIT plans are often viewed as income-tested programs in that receipt of transfer benefits depends on income, with gross transfer benefits received related to income per se. Conversely, CIT plans are *universal*, with a refundable tax credit of some magnitude being awarded to rich and poor alike.

NIT transfer benefits are typically not subject to income taxation. (That is, they are excluded from the income tax base in much the same way that welfare benefits are not included in taxable income), although a separate marginal tax rate (or benefit reduction rate would be applied to them).

The tax credit award in a CIT may or may not be included in the tax base, but in most discussions it is not included. 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, the CIT schedule could look like DBE in the figure. In most discussions, *marginal* tax rates on poor families are the same as those on nonpoor families in CIT plans; in NIT plans, marginal tax rates on poor families are typically larger than those on nonpoor families who are not eligible for the transfer benefit. Because of this difference in the treatment of poor and nonpoor families, a NIT is often viewed as "stigmatizing" the poor.

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

A final difference between typical NIT and CIT plans is in their administration. A NIT plan could involve one agency which would be responsible for the distribution of transfer benefits, and the tax agency responsible for the administration and collection of the income tax, though both functions could be handled by the tax authority. A CIT is viewed as a form of income tax, with only the tax authority involved in program administration.

***Earned Income Tax Credit (EITC) or Earnings Supplement (ES):*** (DGB, in Figure 1)

There is no minimum income guaranteed under this plan. Rather, (as drawn in the figure) earnings are subsidized for all workers whose earnings are below the poverty line. (Depending on the structure of the supplement, the subsidy could be extended to workers whose earnings exceed the poverty line.) *Marginal* earnings are subsidized only up to the earnings level corresponding to the kink the schedule (point G in the diagram). For increases in earnings by low earnings workers, a negative marginal tax rate (or a marginal subsidy rate (or marginal subsidy rate) is applied to incremental earnings. For workers with earnings above this level and up to the poverty level (or above), the schedule resembles that of a negative income tax, with incremental earnings subject to a marginal tax rate. In most analyses, a marginal *subsidy* rate of from 20 to 40 percent is discussed; the marginal *tax* rate is usually held to less than 25 percent.

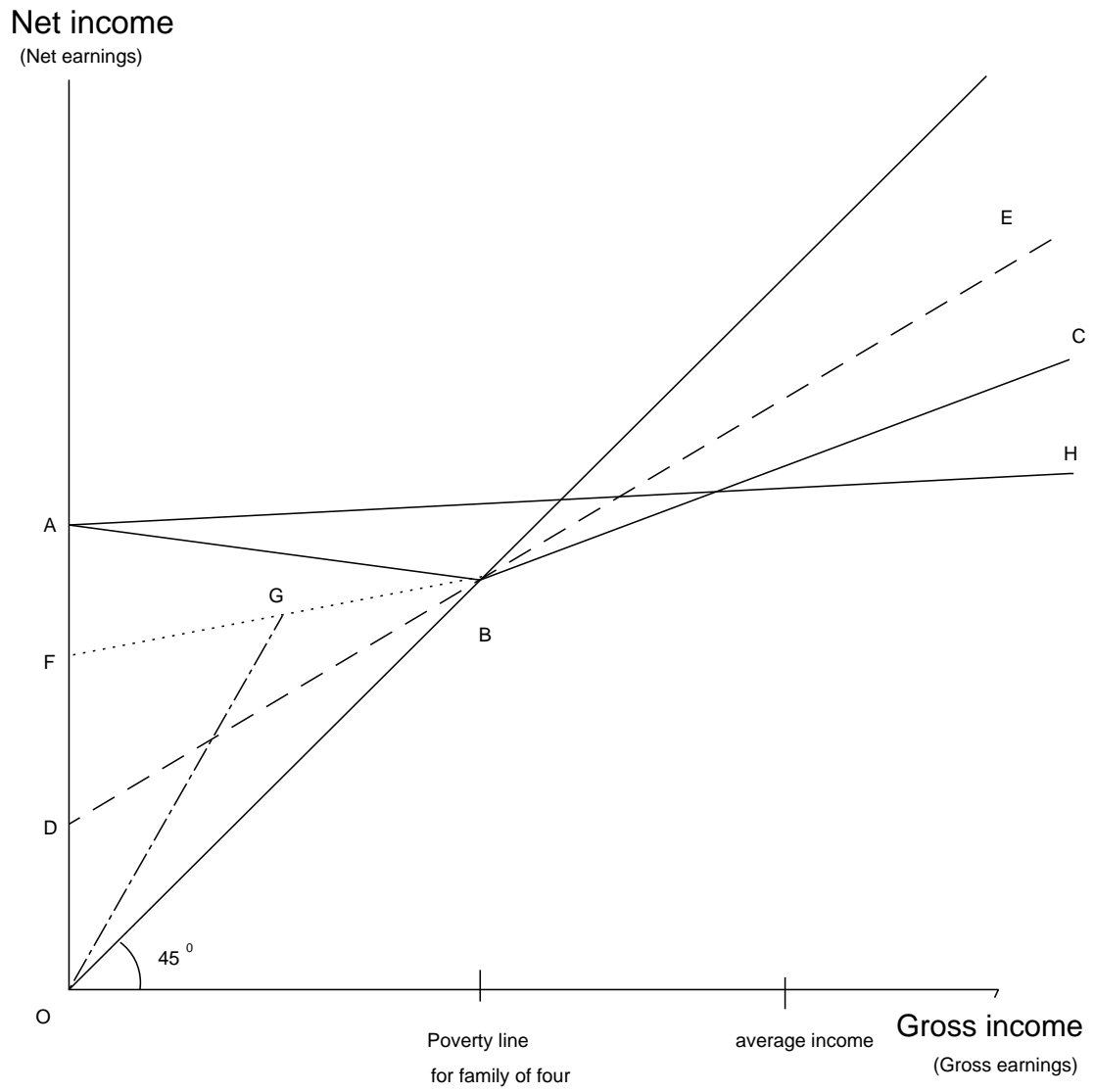
**Characteristics:**

- This program bases supplement payments on the *earnings* of individual *workers*, unlike the BIG, NIT, and CIT programs which typically condition benefits on *family income* and size.
- Eligibility for the subsidy can be limited to specific groups of workers, such as family heads, or family heads with children; it does not have to be a universal program. The schedule could also be adjusted for family size.
- Strong work incentives are provided 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 well. (For workers in this earnings range, the "income effect" tends to discourage additional work, while the marginal subsidy rate encourages additional work.)
- For workers above the maximum supplement point (G in the diagram) but below the poverty line, a supplement is added to total earnings. However, for workers in this earnings range, marginal earnings are subject to a tax rate. (For workers in this earnings range, both the income effect and the wage or substitution effect tend to discourage additional work effort.) However, overall the plan avoids the poverty trap.
- 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 very low earnings negative portion of the schedule.
- This program has an uneven structure of marginal tax rates; they go from negative tax rates at very low earnings levels to relatively high positive rates at higher earnings levels; to lower but positive tax rates for earnings above the poverty line.
- This program has an uneven structure of *marginal* tax rates; they go from *negative* tax rates at very low earnings levels to relatively high positive rates at higher earnings levels; to lower but positive tax rates for earnings above the poverty line.
- Because there is no minimum income guaranteed in this plan, it cannot serve as a nation's sole income support program, or even as the base plan in an income support system.
- EITC or ES plans can be combined (or integrated with) other plans such as NIT or CIT programs, in which case care must be taken to avoid high cumulative marginal tax rates discouraging work effort over that range where both plans have positive marginal tax rates.

- EITC and ES plans are easily integrated with the personal income tax, and are typically thought of as a part of the positive income tax schedule, and administered by the tax authority.
- These plans target their benefits on low *earnings* workers, who may not necessarily live in low *income* families. Targeting of benefits on low income families can be attained by limiting eligibility to the supplement to certain categories of workers, such as the primary earner in a family or the family head.



Figure 1.



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