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EARNINGS SUPPLEMENTATION PLANS FOR "WORKING POOR" FAMILIES: AN EVALUATION OF ALTERNATIVES

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ABSTRACT

Existing Federal public assistance programs provide cash assistance to several groups of low-income families--the aged, the blind, the disabled, and those with dependent families. The primary poverty group excluded from support are the "working poor."

In this paper, a strategy for assisting this group of families is presented and analyzed. This strategy conditions income support on the existence of work effort and bases supplement payments on the sum of husband's and wife's earnings. At very low earnings levels, the supplement increases as earnings increase. For somewhat higher family earnings levels, a negative income tax type "tax rate" is in effect so as to restrict the benefits of the program to poor and near-poor families. For some of the plans which are analyzed, benefits are conditioned on family size.

The first section of the paper develops the principles of an earnings supplement strategy, compares it with the wage rate subsidy and negative income tax strategies, and explores the advantages of alternative versions of earnings supplementation. Plans with both a single benefit schedule and family-size conditioned schedules are presented. Also the proposal of the Senate Finance Committee and the British tax credit plan are discussed.

In the second section of the paper, a number of important issues to be considered in designing an optimal earnings supplement policy are discussed. These include the issues of program eligibility, the definition of earnings, the optimal accounting period, and integration with other social programs.

In the final section of the paper, the expected labor market effects of an earnings supplement program are analyzed. Because the earnings supplement has both an "incentive" and "disincentive" range, the net effect of the program on labor supply is difficult to discern. In general, however, the earnings supplement is seen to provide a greater inducement to work than a negative income tax plan. While similar work inducements are provided by a wage subsidy and earnings supplement, the earnings supplement is observed to induce more upward labor mobility than the wage subsidy. The overall effect of an earnings supplement program on the wage structure is anticipated to be very small.

Several issues are excluded from detailed consideration in the paper. These include issues of administrative structure, integration with the positive income tax and the withholding system, the internal structure of existing transfer programs, and the disparity between the benefit units in existing programs and the earnings supplement.

EARNINGS SUPPLEMENTATION PLANS FOR "WORKING POOR" FAMILIES: AN EVALUATION OF ALTERNATIVES

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Federal public assistance programs have developed over the last forty years to provide income maintenance for specific categories of non-working poor families: the aged, the blind, the disabled, and those with dependent children. Common to all of these categories is the presumed inadequacy of the income support possible from the employment of the responsible adults of the family. Indeed, for several of the programs, the adults of the family are presumed unable to seek or obtain employment in order to provide for their own support. Poor families which are not in one of these categories do not receive the benefit of any cash transfer program, although they do receive benefits from emergency, insurance, and in-kind programs funded by government. The income poverty of these families, the working poor, has become a national concern.

Working poor families remain below the poverty line for several reasons: the wage they command in the market place is too low even if they work full-time, there are insufficient employment opportunities to allow them to work as much as they want, or they are discouraged from working full-time by the low wage rate or undesirable working conditions which they face. Programs to improve workers' skills through training and education have been slow to produce results, while proposed cash transfer programs containing a minimum income guarantee have failed to be politically acceptable. Recently, various plans have been suggested to aid the working poor by supplementing their earnings with cash transfers.[1] Unlike the categorical programs, these plans do not break the tie between family income and work effort. Rather, they serve to improve the terms-of-trade through which work effort generates family income.

This paper discusses the supplementation of earned income as a strategy for improving the economic status of low income families. It analyzes the advantages and disadvantages of this form of social policy and raises many of the issues which will have to be considered in designing an optimal earnings supplement program.

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[1] These plans include the combination wage rate and earnings subsidy proposed in 1972 by the Senate Finance Committee, the recently adopted British income supplement program, and a variety of other wage rate and earnings subsidy proposals. See U.S. Congress, Senate Finance Committee, Summary of the Principle Provisions of H.R.1 as Determined by the Committee on Finance, June 13, 1972; Robert H. Haveman, "Work Conditioned Subsidies as an Income Maintenance Strategy: Issues of Program Structure and Integration," in U.S. Congress, Joint Economic Committee, Studies in Public Welfare, 1973; and Michael C. Barth, "Universal Wage Rate Subsidy: Benefits and Effects," in U.S. Congress, Joint Economic Committee, The Economics of Federal Subsidy Programs, part 4, 1972.

The analysis of an earnings supplement program is based on several presumptions about the program environment and specific policy decisions. While a concrete policy proposal may well deviate from these assumptions, they serve to focus our analysis on the primary issues to be considered in evaluating this strategy. Our subsequent discussion analyzes the advantages and disadvantages of these assumptions and alternatives to them.

Assumption 1. The current categorical income maintenance programs will continue in operation under existing principles.

Assumption 2. No major public employment program will be established.

Assumption 3. The cumulation of benefits and tax rates from the several programs will be avoided through integration provisions in public transfer programs other than the earnings supplement program.

Assumption 4. All family units, including unrelated individuals, couples without children, single-parent families, and husband-wife families with children will be eligible for the earnings supplement program.

Assumption 5. Earnings supplements will be provided according to a stated schedule on the sum of husband's and wife's earnings.

The first assumption makes clear that we are not considering a complete income maintenance system, but rather one program which, when added to the current system, will make an improvement in that system. The third assumption recognizes the general purposes and wide coverage of an earnings supplement program and, hence, the need for it to be integrated with the rest of the system. Because the categorical programs are more limited in their objectives and coverage, program integration provisions to accommodate the earnings supplement will be included in them.

The second assumption sets our proposals apart from earlier proposals for earnings supplementation, especially that of the Senate Finance Committee. A public employment program has some desirable benefits in and of itself, but the plan discussed here is not contingent upon such a program.[2]

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[2]The Senate Finance Committee proposal included a major public employment program as an accompaniment to earnings supplementation. This program was essential because of the grouping of all family heads into employable and unemployable categories. Because those in the former category (including some AFDC mothers) would not be eligible for the categorical cash transfer programs, it was felt that a guarantee of employment to such families was essential. In addition to this function, a public employment program could also be viewed as correcting serious inadequacies in the labor market for low wage workers, such as seasonality and part-time and intermittent work.

The fourth and fifth assumptions are made as preliminary judgments about the proper scope of the program. In section II below, we shall discuss alternative possibilities.[3]

In the first section of this paper, we will develop the principles of an earnings supplement strategy, compare it with the wage rate subsidy and negative income tax strategies, and explore the advantages of alternative versions of the earnings supplementation strategy. Plans with both a single benefit schedule and family-size conditioned schedules are presented. Also the proposal of the Senate Finance Committee and the British tax credit plan are discussed.

In the second section of the paper, a number of important issues to be considered in designing an earnings supplement policy will be discussed. These include the issues of program eligibility, the definition of earnings, the optimal accounting period, and integration with other social programs.

In analyzing the issue of who is to be eligible for the program, four options are considered: all family units (including unrelated individuals), families with children, families with both husband and wife present, and all family units except various one-person families of irregular status. After evaluating the advantages and disadvantages of various eligibility definitions, it is concluded that on equity grounds the best criterion is the broadest, although other cost considerations may require a more narrow eligibility criterion.

In evaluating the question of the earnings definition on which supplements would be based, several options are again considered. It is concluded that for a program designed with a strong anti-poverty objective, supplements should be paid on the sum of husband and wife earnings other than the earnings of only the family head or the earnings of all family members individually. In considering how income other than earnings would be treated in the program, the best procedure would be to include income continuation and unemployment benefits in earnings, to ignore the benefits from other income-conditioned programs, and to "tax" unearned income at some fairly high rate. In this same vein, it is suggested that in-kind income from assets be imputed and treated as unearned income.

In section II, a good deal of attention is paid to the issue of the appropriate accounting period for an earnings supplement. Given the irregular work experience of many low income families, the choice of accounting period has a significant effect on the benefits received by many families. It is emphasized that a carryover accounting period such as that developed for FAP cannot be used for an earnings subsidy plan. It is concluded that a yearly accounting period is preferable to a quarterly accounting period, and that intermittent payments could be made to families if an end-of-year settlement procedure were developed.

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[3] In addition to these major assumptions, our discussion also presumes that the period over which supplemental benefits are calculated is one year, that supplements will not be paid on unearned income (rent, interest, etc.), and that earnings of workers who are neither head nor spouse will not be eligible for supplemental benefits.

One of the major issues discussed is the integration of an earnings supplement plan with existing income transfer programs. Because the earnings supplement program is a broad coverage program, it is proposed that it ignore the benefits of other more specialized programs. These programs, however, should account for earnings supplement benefits in their payment schedules. This approach to integration provides considerable control over the problem of horizontal equity and high cumulative tax rates.

In section III of the paper, the expected labor market effects of an earnings supplement program are analyzed. Because the earnings supplement has both an "incentive" and "disincentive" range, the net effect of the program on labor supply is difficult to discern. In general, however, the earnings supplement is seen to provide a greater inducement to work than a negative income tax plan (which extends the benefit schedule of the earnings supplement from the pivot point down to zero earnings). The earnings supplement has a smaller range over which the tax on earnings prevails and, moreover, provides no minimum income guarantee. While similar work inducements are provided by a wage subsidy and earnings supplement, the earnings supplement is observed to induce more upward labor mobility than the wage subsidy. The overall effect of an earnings supplement program on the wage structure is anticipated to be very small.

Several issues are excluded from detailed consideration in the paper. These include issues of administrative structure, integration with the positive income tax and the withholding system, the internal structure of existing transfer programs, and the disparity between the benefit units in existing programs and the earnings supplement. These deserve further attention.

I. AN EARNINGS SUPPLEMENT POLICY: SOME ALTERNATIVES

A. The Nature of an Earnings Supplement Strategy

Concern with work incentives has been a primary issue in legislative consideration of anti-poverty income transfer programs. Two characteristics of these programs have caused concern: the provision of a minimum income guarantee and the "taxation" of increases in earnings from additional work effort. An earnings supplement strategy addresses these concerns head-on--it conditions provision of income supplementation on work effort and, for low earners, directly ties the amount of subsidy to the amount of work effort. Moreover, unlike other proposed income support strategies (such as a negative income tax or a demogrant or FAP), earnings supplementation does not provide a minimum income guarantee.

In Figure I-1, the basic structure of an earnings supplement policy is presented. On the horizontal axis, the earnings of a family are measured; the total income (earnings plus supplement) of the family is measured on the vertical axis. If there were no supplementation or taxes, a family would find itself located somewhere on the 45° line--total income would equal family earnings. For example, family earnings of OX would equal total family income of Xa.

With an earnings supplement policy, a governmental payment is provided to low income families based upon the level of their labor market earnings. This is shown by the labeled schedule lying above the 45° line. This schedule shows that with zero earnings, a family would receive zero benefits--there is no income guarantee. However, as earnings increase above zero, the benefit payment--indicated by the vertical distance between the 45° line and the earnings supplement schedule--also increases. For example, if earnings were OX (which is equal to Xa), the benefit payment would be ab. At the higher level of family earnings of OX' (equal to X'c), the benefit payment rises to cd. As earnings increase beyond OX', the absolute amount of the benefit drops to zero. This is to avoid the payment of benefits to families with high earnings levels.

Two aspects of the diagram should be noted. First, the supplement schedule has a "kink" or "pivot point" in it at earnings level OX'. At this earnings level, the marginal supplement rate changes from a positive number to a negative number. At any earnings level below OX', an increase in earnings brings forth an increase in the supplement payment; at earnings levels between OX' and OX", an increase in earnings brings forth a decrease in the amount of the supplement (although the amount of the supplement is still positive). Conversely, a decrease in earnings at earnings levels below OX' decreases the amount of supplement received, while a decrease in earnings at earnings levels between OX' and OX" increases the amount of supplement received.[4] Families with zero earnings receive no income supplement. For many such families, benefits from other public transfer programs provide the primary source of income.

Several characteristics of an earnings supplement policy should be emphasized:

- It provides an incentive for families with very low earnings to increase their work effort.[5] As opposed to the wage rate subsidy, this incentive applies to both increased hourly wages and increased hours worked. This is discussed more fully below.

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[4] These effects hold except for substantial earnings changes which move the recipient over the pivot point in the supplementation schedule. In such cases, it would be possible for earnings to increase (decrease) and the supplement received to decrease (increase).

[5] This statement is based on the assumption that the labor supply schedule shows a positive relationship between wage rates and labor supply; i.e., that it is not backward bending. This assumption serves as the basis for the work incentive discussions in Section I. More detailed discussion of this assumption is provided in Section III.

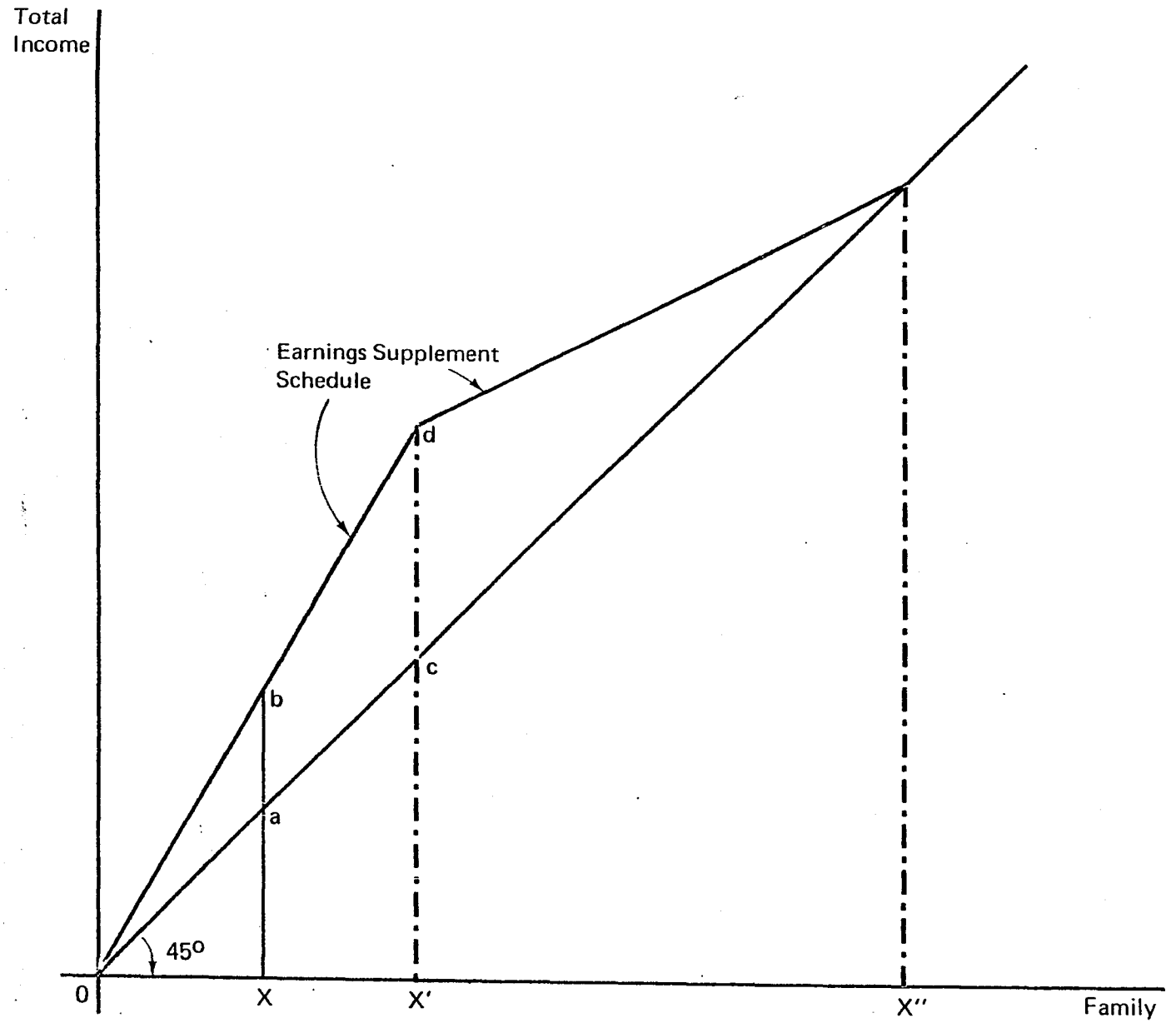
Total
Income
Earnings Supplement
Schedule
d
c
b
a
45°
0
X
X'
X''
Family
Earnings

Figure I-1.

- It provides the highest total benefits to families with earnings in the mid-range between zero earnings and breakeven earnings.[6] The majority of "working poor" families tend to be in this earnings range.

- There is no "guaranteed income." A family which fails to participate in the labor force is granted no benefit.

- Beyond the "pivot point" (earnings level OX'), the earnings supplement is very similar to a negative income tax. There is an implicit tax on earned income between OX' and the breakeven earnings level (OX").

- By varying the earnings supplement by family size, partial melding of the supplement schedule with the Federal personal income tax schedule can be achieved.[7]

B. Earnings Supplements, Wage Rate Subsidies, and the Negative Income Tax

The earnings supplement, the wage rate subsidy, and the negative income tax--the primary strategies for income support to the poor--have several characteristics in common. Most basically, they share the objective of providing income supplementation to low income families. In addition to issues of Federal cost and the perceived generosity of the plan,[8] the labor supply effect has been a primary issue of concern regarding these plans. In the comparisons which follow the brief descriptions of the wage rate subsidy and the negative income tax, the differential work incentive effects of the plans will be emphasized.

The negative income tax bases supplemental payments to poor families on the income level of the family; higher benefits are awarded to families with lower than with higher incomes. As such, the negative income tax includes an income guarantee and imposes a tax on increments to earned income. With reference to Figure I-2, the negative income tax schedule

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[6] The breakeven level is that level of earnings beyond which no supplemental payment is made. For most of the cases discussed in this paper, the breakeven level is in the neighborhood of $5,000 for a family of four. Hence, the bulk of supplement payments accrues to families in poverty.

[7] Such a family-size conditioned plan is described below.

[8] While the level of income transferred to low income families indicates the generosity of a plan, participants in the debate over alternative welfare strategies have often focused on the level of the guarantee provided families with zero income. While this value is an indicator of generosity for families with very low (or zero) earnings, it should be noted that the bulk of poor families have earnings in excess of these levels.

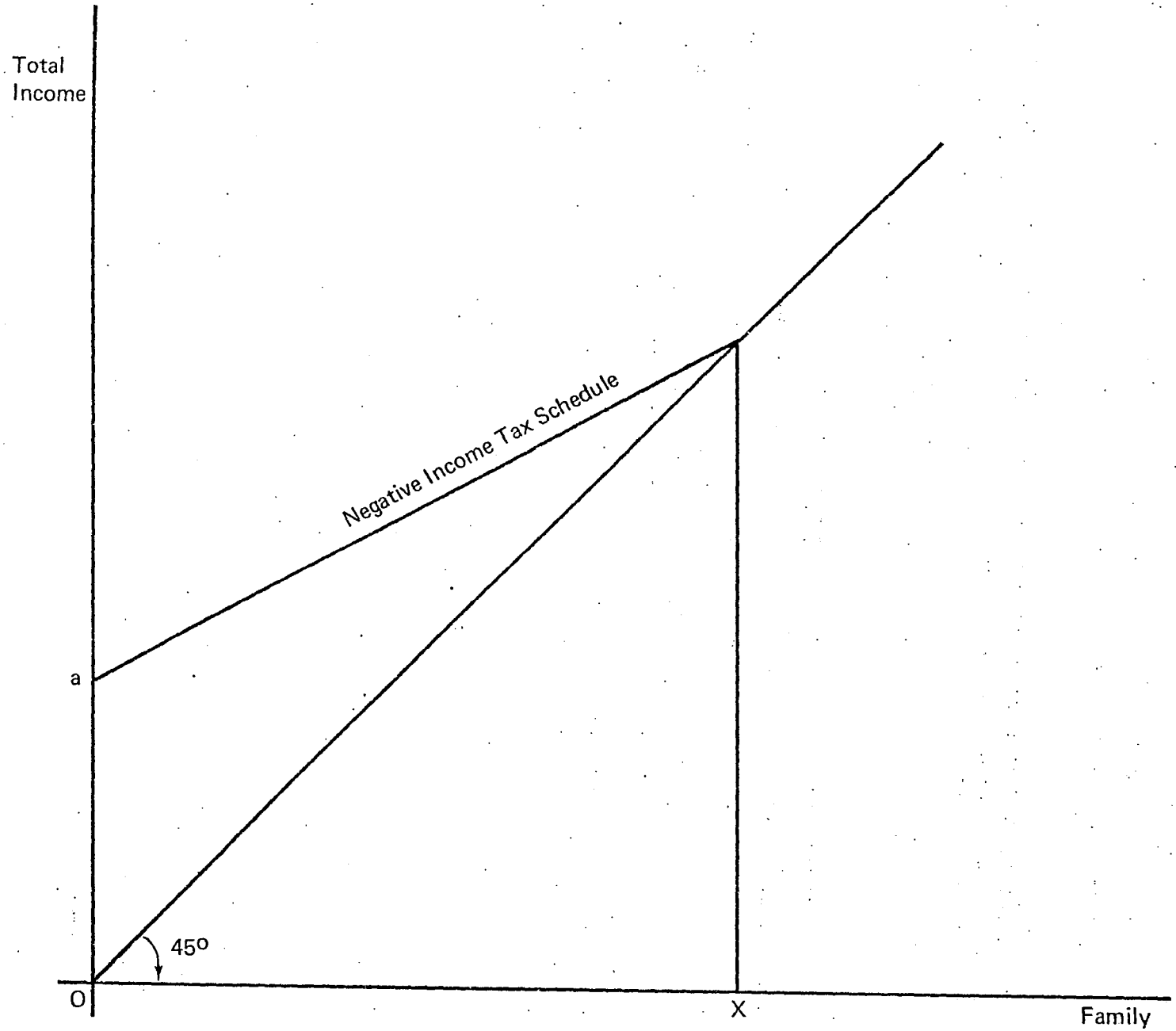
Total
Income
Negative Income Tax Schedule
a
45°
O
X
Family
Earnings

Figure I-2.

is shown as the line which cuts the 45° line from above. It implies a guaranteed income level of Oa (a standard figure often mentioned is $2400 for a family of four persons), which represents the grant the family would receive if it had no other income. As earnings levels increase above zero, the grant diminishes; each dollar of additional earnings implies a reduction of some fraction of a dollar in the grant (the tax rate). At an earnings level of OX, the grant falls to zero; this is the breakeven earnings level.

The negative income tax schedule can be thought of as an extension of the flatter segment of the earnings supplement schedule from the "pivot point" down to a zero earnings level, hence transferring more income to poor families in this earnings range.

The primary points of comparison between an earnings supplement and a negative income tax are the following:

- Work Disincentives--The negative income tax imposes an implicit tax rate on earned income throughout the range of earnings in which it is in effect. To families not currently on welfare--the working poor--this implies a tax on work effort.[9] The tax rate implicit in most recent proposals has been about 50 percent. By comparison, the earnings supplement provides increasing benefits on marginal earnings throughout a sizable earnings range and, hence, increases the return to work effort throughout that range. However, for earnings above the "pivot point" earnings level (OX' in Figure I-1) the work incentive effect of an earnings supplement would be similar to that of a negative income tax.

- Income Guarantee--Whereas the negative income tax guarantees a minimum income for poor families (Oa in Figure I-2), the earnings supplement does not. In terms of the provision of income support to low income husband-spouse families, this is of relatively minor importance. As the data indicate, the bulk of these family units are in an earnings range in which the income guarantee would be of little relevance.[10] It is of major importance, however, in terms of public acceptance. The income guarantee has come to be seen as an inducement to retire from the labor force and has generated substantial opposition for that reason. Moreover, advocates of more generous income support schemes have--somewhat mistakenly--focused on the income guarantee as the sole indicator of the generosity of the plan.

- Income Support to the Poor--To some extent the negative income tax would provide more income support to families with very low earnings than would an earnings supplement with the same breakeven earnings level. This can be seen by comparing Figures 1 and 2; the

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[9] For families currently on welfare, the negative income tax could actually mean an increase in work incentives. This is due to the high (67 percent) implicit tax rate in the AFDC program.

[10] See Appendix C.

earnings supplement schedule for very low levels of earned income lies below the schedule of the negative income tax. However, as mentioned above, there are relatively few two-parent families with children in this very low earnings range. In general, both programs are highly effective in targeting their benefits on the poverty population.

- Work Test--To insure that eligible workers do not cease working and accept the minimum income guarantee, the imposition of a work test is often judged to be a necessary accompaniment of a negative income tax plan. Because of the work conditioned nature of the earnings supplement and the absence of a minimum income guarantee, an explicit work test would not be necessary in this case.

- Income Reporting--The negative income tax provides an incentive to eligible families to underreport their actual income. Such underreporting increases the benefit received. The earnings supplement contains this same incentive for families at earnings levels above the pivot point. The incentive for families with earnings below the pivot point is to overreport their actual earnings.

The wage rate subsidy bases income supplementation on the wage rate at which an employed person works. As such, it is an income supplementation program which is directed at an individual worker rather than a family based program such as the negative income tax or earnings subsidy.[11] While most wage rate subsidy programs have been directed toward individual workers, some plans involve the payment of the subsidy to employers. In the following discussion, we will assume that the subsidy would be paid to individual workers.

Typically, in this form of program a subsidy would be paid to a worker which is some fraction (defined as the subsidy rate) of the difference between his market wage rate and some legislatively determined target wage rate. For example, if the target wage rate was $2.00/hour and the subsidy rate .5, a worker earning a market wage of $1.50/hour would receive a subsidy of $.25/hour for each hour worked [$.25 = .5 x ($2.00 - $1.50)].

Figure I-3 depicts a wage rate subsidy. Two wage rate subsidy schedules are required to describe a single plan.[12] Two schedules are required because there exist two means of increasing earned income--working an increased number of hours or working at a higher paying job.

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[11] While this statement is true for standard wage rate subsidy plans which have been proposed, one could determine eligibility by family income as in the WIN tax credit. Even in this plan, however, the amount of the subsidy payment depends on the wage rate of the individual worker.

[12] Indeed, each of the schedules relate to a worker with either a given number of hours worked or a given wage rate. For a worker with a lower wage rate, Schedule A would be depicted by a ray from the origin with a steeper slope than the depicted Schedule A. For a worker working more hours but at a lower wage rate, Schedule B would be parallel to the depicted Schedule B, but lying above it.

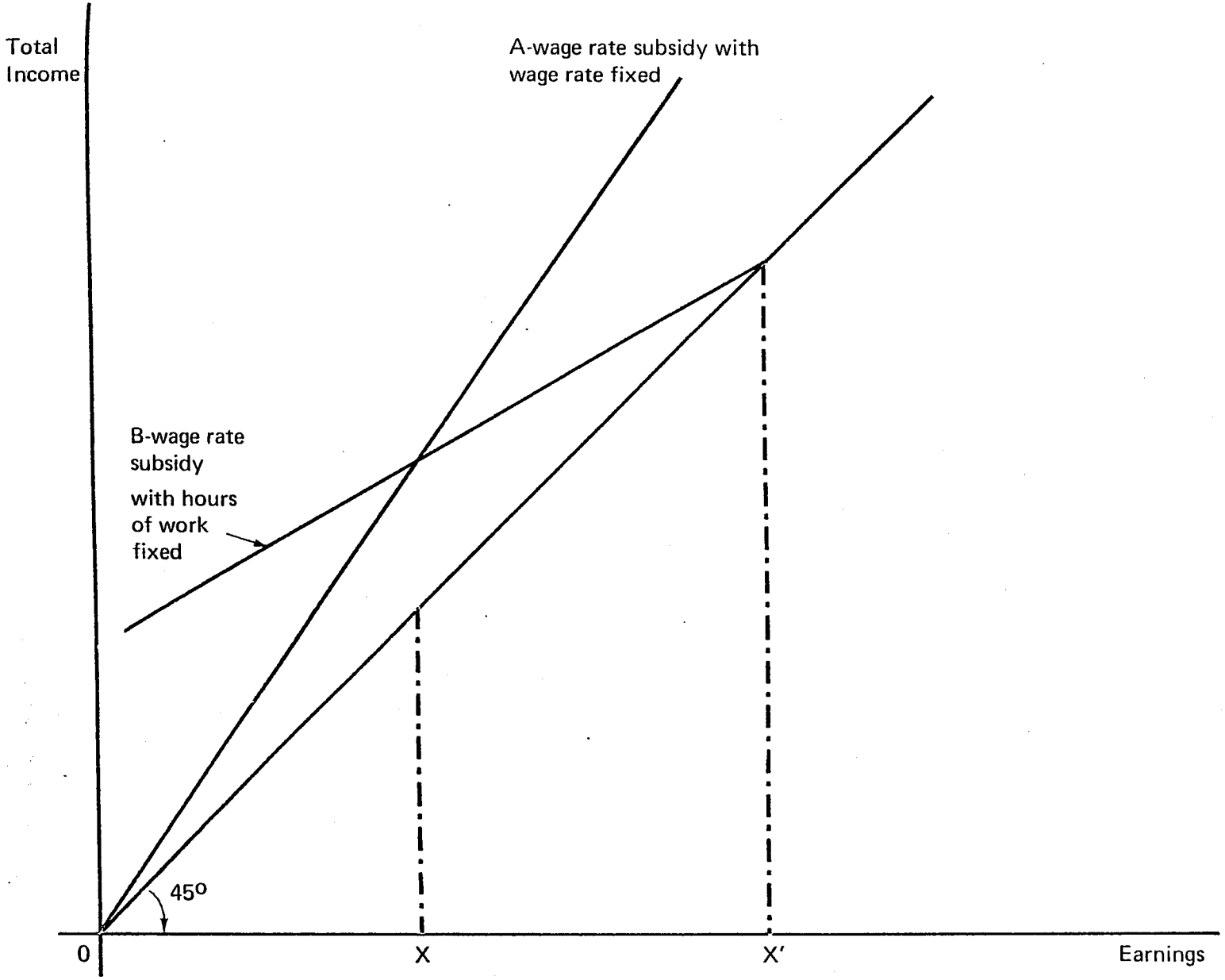
Total
Income
A-wage rate subsidy with
wage rate fixed
B-wage rate
subsidy
with hours
of work
fixed
45°
0
X
X'
Earnings

Figure I-3.

Schedule A shows the wage rate subsidy to a worker who increases his earnings by working more hours (say, moving from part to full-time employment). It shows that the higher the level of earned income, the higher the total benefit received, given a fixed wage rate. Thus, if the work incentive in a wage rate subsidy leads to an increase in the number of hours worked, this plan would have much the same sort of benefit schedule as an earnings supplement over the earnings range with a positive supplement rate.

Schedule B represents the benefit schedule for earnings increases due to an increase in the wage rate at which a worker is employed (holding fixed the number of hours worked). It shows that the subsidy decreases as earned income increases; hence, there is an implicit tax on earnings increases from increased wage rates.

In comparing an earnings supplement with a wage rate subsidy, the following points are important:

- Work Disincentives--Comparison of the differential incentives from an earnings supplement and standard wage rate subsidy proposals must consider several points: (1) The wage rate subsidy impose an implicit tax on all earnings increases from increased wage rates. This implies a disincentive for upgrading one's skill through increased education or institutional training or engaging in job-search for higher paid employment.[13] While this disincentive applies to all workers under a wage subsidy plan, under an earnings supplement it applies only to those workers with earnings above the pivot point.[14] (2) The wage rate subsidy increases the return from an increase in hours worked for all workers covered by the program. The earnings supplement increases the return from an increment in hours worked for those workers whose earnings are below the pivot point, but not for those with earnings above that point. (3) Most proposed wage rate subsidy plans stipulate a wage rate below which the subsidy does not apply. For such plans, there is a strong incentive for low wage workers to increase their wage rate to the level at which the subsidy begins.

- Income Guarantee--Neither the earnings supplement nor the wage rate subsidy plan contain an income guarantee. Both condition payment of benefits on the existence of work effort. However, the earnings supplement does apply to all earned income up to

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[13] It should be noted, however, that this disincentive does not apply to the upgrading of skills through obtaining employment with a substantial on-the-job training component. See Irwin Garfinkel, "A Skeptical Note on 'The Optimality' of Wage Subsidy Programs," American Economic Review, June, 1973.

[14] It would be possible to conceive of a wage rate subsidy plan which subsidized wage rate increases for low wage rate workers and "taxed" wage rate increases for higher wage rate workers. Such a plan would have the same general incentive effects for wage rate changes as does an earnings supplement. We are indebted to Duncan MacRae for bringing this special case to our attention.

the breakeven level, while the wage rate subsidies commonly proposed and analyzed have a minimum wage rate below which the subsidy does not apply.[15] In concept, however, both the earnings supplement and wage rate subsidy plans could be effective over the full range of earnings levels up to the breakeven point.

- Income Support to the Poor--Because the earnings supplement applies to the earned income of a family unit, it tends to be more efficient in reducing poverty per dollar of government cost than does a wage rate subsidy. A substantial portion of the benefits of a wage rate subsidy accrue to non-poor families. This occurs because many people in non-poor families are, as low wage rate workers, eligible for wage rate subsidy. This problem could be mitigated somewhat in a wage-rate subsidy plan by limiting eligibility to only family heads.

- Work Test--Because of the conditioning of transfer benefits on work effort, an administrative work test is superfluous in both the earnings supplement and wage rate subsidy policies.

- Income Reporting--In the wage rate subsidy, the size of the subsidy is a negative function of the wage rate, for wage rates above some minimum. Hence, if a wage rate is above that minimum, financial gains could be obtained by both employer and employee through collusion to report the payment of a wage rate which is below the actual wage rate being paid. Moreover, for a standard wage rate subsidy with a minimum applicable wage rate, there is an incentive for collusion to report a wage rate above that minimum, for actual wage rates which are below it. As stated above, in an earnings supplement plan there is an incentive with earnings below the pivot point and an incentive to underreport earnings for recipients with earnings above the pivot point.

C. Some Earnings Supplement Options

Compared to other anti-poverty strategies, the earnings supplement approach appears relatively effective in its ability to transfer income to low income families while, at the same time, maintaining the incentive to work. However, various forms of the supplement achieve these two objectives to different degrees. In particular, given a constant breakeven level, more generous plans tend to be accompanied by strong work disincentives. This tradeoff relationship is a significant one and must be carefully considered in designing any particular earnings supplement program. It is analyzed in the following discussion.

A second important consideration is the relationship of the benefit levels of an earnings supplement program to the levels of need of beneficiaries. To the extent that larger families with any given income level have larger unmet needs than smaller families at that income level,

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[15] The purpose of the minimum wage rate provision is to target the benefits of the program on the poverty population. Many workers employed at wage rates below the stipulated minimum are teenagers and secondary workers from non-poverty families.

a case can be made for relating the size of benefit payments to family size. Nearly all income transfer programs contain such family-size conditioned benefit schedules, including AFDC, public housing, adult assistance, social security, and the personal income tax structure. Options for conditioning benefits on family size are also analyzed in the following discussion.

1. Three Earnings Supplement Plans--The Anti-Poverty-Work Incentives Tradeoff

If the primary objective of a national program of income support to working poor families is the maintenance of or increase in work incentives, it could be argued that a positive encouragement to work effort should prevail over as large a portion of the low earnings range as is consistent with some given budgetary outlay. Because, in an earnings supplement program, the "tax" on earnings required to phase out the program at higher earnings levels implies a work disincentive over earnings ranges beyond the pivot point, it would be the implicit objective of this plan to minimize the "tax" rate and the earnings range over which it is effective. To do so would require that the positive supplement rate be a modest one. In this way the earnings range experiencing a positive inducement to work would be large, the size of the work inducement (the supplement rate) would be modest, and the range of earnings with a tax on earnings would be narrow.[16] The amount of income support provided low income families would be relatively small, as would the budgetary cost of the program.

An example of such a plan is presented as Plan A in Table I-1 and Figure I-4. This plan, it should be noted, has a modest supplement rate of 20 percent on earnings from zero earnings to $3,000 of earnings and a marginal "tax" rate of 30 percent on earnings from $3,000 to $5,000. The breakeven level is $5,000. The maximum benefit provided a family under this plan is $600, which occurs at an earnings level of $3,000.

A plan with the same breakeven earnings level ($5,000) but with a somewhat greater earnings supplement rate and level of income supplementation is shown as Plan B in Table I-1 and Figure I-4. In this plan, however, the supplement rate is 50 percent (implying an increase of 50 percent in the worker's wage rate) over the earnings range from 0 to $2,000 and a "tax" rate of 33 percent on earnings from $2,000 to $5,000. The maximum allowance is $1,000 which is paid to a family at an earnings level of $2,000--making that family's total income $3,000. As compared with Plan A, this plan has a larger earnings supplement rate, a smaller earnings range over which it is applicable, and a larger total benefit paid at any earnings level. In moving from the small to the medium size plan, several program characteristics have been altered: (1) the rate of earnings supplementation over the low earnings range has been increased, (2) the earnings range over which this work inducement applies has been

[16] It should be noted that the earnings supplement contains two types of variables of relevance to the issue of work disincentive--the size of the supplement rate and the range over which the supplement rate applies. The negative income tax, on the other hand, has only the former of these variables to be considered. The negative income tax, however, also has the disincentive effect of the guarantee to be considered.

decreased, (3) although the tax rate on earnings required to phase out the program has remained about the same, the earnings range over which it is effective has been increased, and (4) the amount of income support provided at any earnings level has been increased.

A still larger variant of the earnings supplement strategy discussed here is designated as Plan C in Table I-1 and Figure I-4. In this variant, the subsidy rate is placed at 100 percent on earned income up to $1,700; beyond $1,700 the schedule implies a tax rate of 50 percent. Again the breakeven point was held to about $5,000. The largest subsidy payment in this plan is $1,700, which is paid to a family with $1,700 of earnings. Again the tradeoffs mentioned above are in evidence. The increase in the work incentive from a higher earnings supplement rate is accompanied by a smaller earnings range over which this supplement rate applies, a substantially higher tax rate on earnings is required to maintain the breakeven level, and an extension in the earnings range over which this tax rate applies. This plan does, however, increase the income support to low income families at any earnings level.

2. Family-Size Conditioned Earnings Supplement Options

All of the plans outlined in Section 1 base supplement payments on family earnings alone; no recognition is given to the different levels of need of families of various sizes. The advantage of these "single-variable" plans is the simplicity of their benefit schedules and, to some extent, maintenance of the principle of "equal pay for equal work."[17] They have the disadvantage of failing to recognize the differing level of need of various size families.

In this section, two earnings supplement plans are presented which alter the benefit level for families of any given earnings level, depending on the family size. In addition to recognizing the relationship of need to family size, these plans move toward an integration of the earnings supplement schedules with the positive Federal income tax schedule. The breakeven level for families of various sizes is the earnings level at which the family must begin paying Federal income tax.[18] Summary facts regarding each are shown in Table I-2.

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[17] The principle of "equal pay for equal work" requires that two people doing equivalent work should receive the same pay. If any one of the plans discussed in section 1. is considered, two workers performing the same function and receiving the same wage rate will receive the same earnings supplement (assuming that neither of their spouses has earned income). If the earnings supplement program contains family-size conditioned benefit schedules, the workers with the larger family would receive the larger supplement, implying a large effective wage rate. However, it should be noted that in the case of the earnings supplement based on the earnings of husband and wife, hours worked, the market wage rate, and the work effort of various family members can all vary while the earned income on which the supplement is based remains constant.

[18] The relationship between family size and the adjusted gross income level at which Federal income tax liability begins is as follows: two-person family - $2,900; three-person family - $3,650; four-person family - $4,400; five-person family - $5,150; six-person family - $5,900; seven-person family - $6,650.

Table I-1.

Net Allowances from Alternative Earnings Supplement Plans

Plan A				Plan B				Plan C			
Family Earnings	Earnings Supplement	Total Family Income	Marginal Supplement Rate	Family Earnings	Earnings Supplement	Total Family Income	Marginal Supplement Rate	Family Earnings	Earnings Supplement	Total Family Income	Marginal Supplement Rate
$ 0	$ 0	$ 0	---	$ 0	$ 0	$ 0	---	$ 0	$ 0	$ 0	---
500	100	600	+20%	500	250	750	+50%	500	500	1000	+100%
1000	200	1200	+20%	1000	500	1500	+50%	1000	1000	2000	+100%
1500	300	1800	+20%	1500	750	2250	+50%	1500	1500	3000	+100%
2000	400	2400	+20%	2000	1000	3000	+50%	1700	1700	3400	+100%
2500	500	3000	+20%	2500	883	3337	-33%	2000	1550	3550	-50%
3000	600	3600	+20%	3000	666	3666	-33%	2500	1300	3800	-50%
3500	450	3950	-30%	3500	500	4000	-33%	3000	1050	4050	-50%
4000	300	4300	-30%	4000	333	4333	-33%	3500	800	4300	-50%
4500	150	4650	-30%	4500	167	4667	-33%	4000	550	4550	-50%
5000	---	500	-30%	5000	---	5000	-33%	4500	300	4800	-50%
								5000	50	5050	-50%

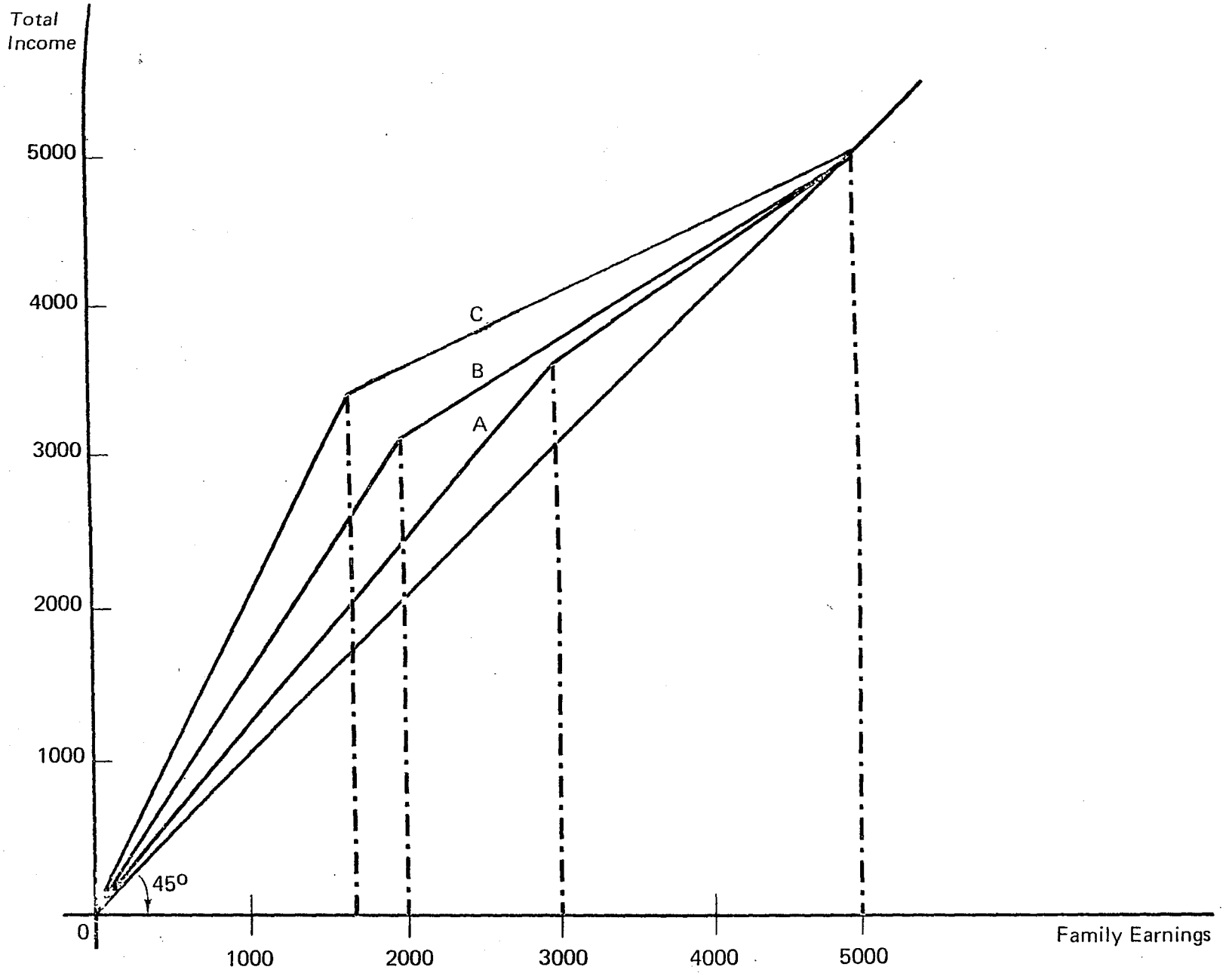
Total Income
5000
4000
3000
2000
1000
0
C
B
A
45°
1000
2000
3000
4000
5000
Family Earnings

Figure I-4.

While both plans have the same family-size-specific breakeven levels, the first variant assures that larger families receive larger earnings supplements than smaller families at all earnings levels. As shown in Figure I-5 (for families of size 2, 4, and 6), this requires the positive supplement rate to be greater for larger families than for smaller families. In this variant, the tax rate and the pivot point do not vary by family size, although family-size conditioned plans could be devised in which the supplement rate, the tax rate, and the pivot point could all vary by family size. Implicit in the plan shown in Figure I-5 is a positive relationship between the earnings range over which the tax rate is effective and family size.

The supplement schedule of the second plan is somewhat simpler than that of the first, although it does not assure that supplement payments will be larger for larger size families throughout all earnings ranges. It is depicted in Figure I-6, for family sizes 2 through 6. In this plan, only a single supplement rate (50 percent) and a single tax rate (33 percent) are in effect. However, the pivot point and the breakeven levels depend on family size with larger family sizes having a higher pivot point and breakeven level. For earnings levels below about $1,200, the supplement provided any family is the same, regardless of size; beyond $1,200 earnings supplements are family-size conditioned. The earnings range over which both the supplement rate and the tax rate apply are positively related to family size.

3. The Senate Finance Committee Plan

In addition to the above options, the work bonus plan proposed by the Senate Finance Committee in 1972 should be mentioned. In that plan, low income workers who are family heads would be eligible for a 10 percent earnings supplement if the combined income of the husband and wife is $4,000 or less. The supplement would be phased out at a rate of 25 percent, implying a breakeven level of $5,600. In addition, workers in private sector or regular public sector jobs paying less than the national minimum wage but more than three-fourths of it, would receive a wage rate subsidy equal to three-fourths of the difference between their market wage rate and the minimum wage.

Besides the earnings supplement and wage rate subsidy, the Senate Finance Plan provided for a modified AFDC system for families with unemployable family heads, a major public employment program administered by a Work Administration, and sizable support for day care services. This plan is described in some detail in Appendix A.[19]

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[19]This description is taken from Robert H. Haveman, "Work Conditioned Subsidies as An Income Maintenance Strategy," in U.S. Congress, Joint Economic Committee, Studies in Public Welfare, 1973. That paper also contains a critique of the efficiency and equity effects of the Committee proposal as well as its effect on the national wage structure and its administrative feasibility.

Table I-2

Summary Facts for Two Family-Size Conditioned Earnings Supplement Plans

	Family Size		
	2	4	6
Breakeven Earnings Level			
Plans I and II	$2900	$4400	$5900
"Pivot Point" Earnings Level			
Plan I	$2000	$2000	$2000
Plan II	$1165	$1767	$2369
Supplement Rate			
Plan I	+20%	+50%	+90%
Plan II	+50%	+50%	+50%
Tax Rate			
Plan I	-42%	-42%	-42%
Plan II	-33%	-33%	-33%
Maximum Benefit Payment			
Plan I	$400	$1000	$1800
Plan II	$583	$833	$1184

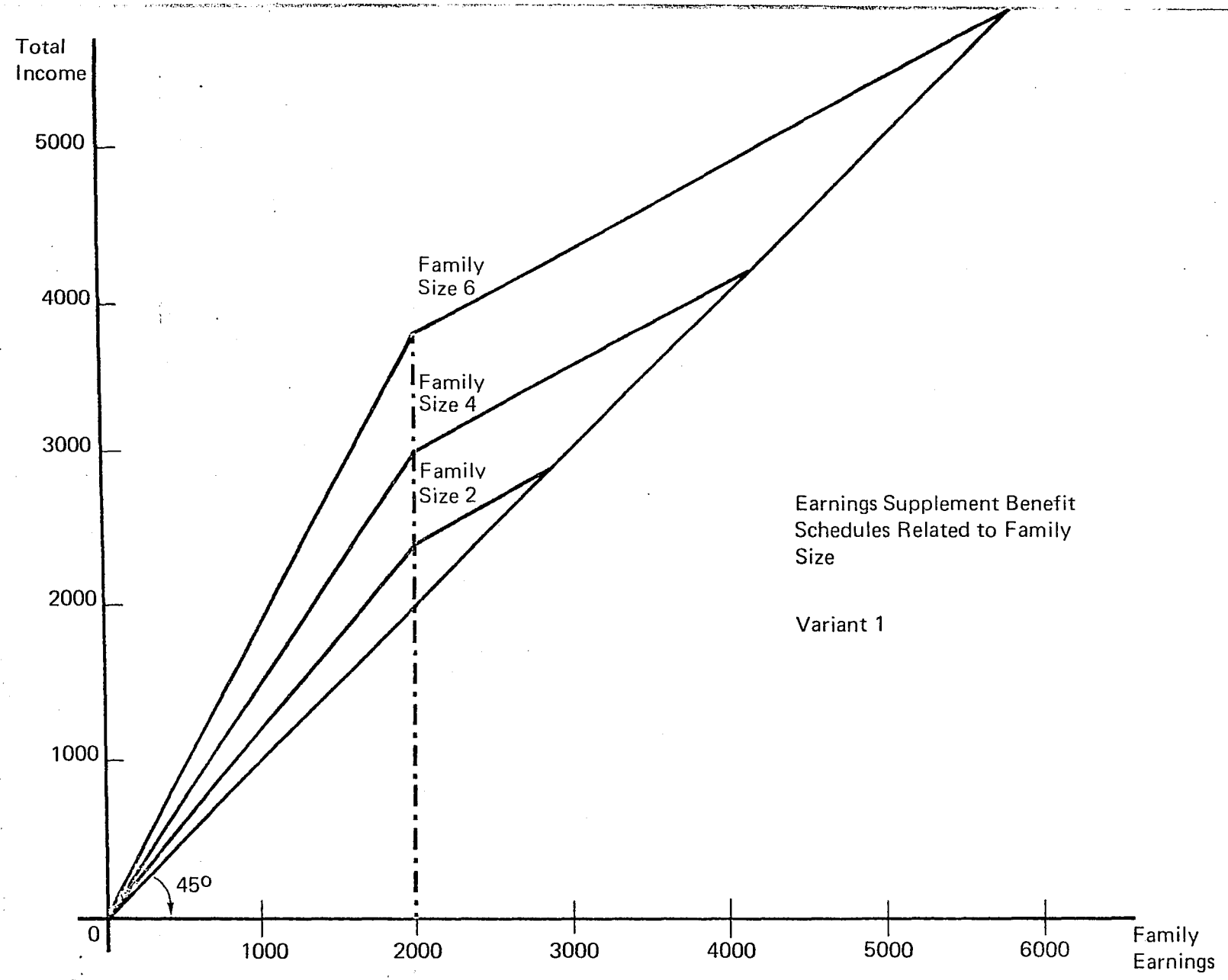
Total Income
5000
4000
3000
2000
1000
0
Family Size 6
Family Size 4
Family Size 2
45°
1000
2000
3000
4000
5000
6000
Family Earnings
Earnings Supplement Benefit Schedules Related to Family Size
Variant 1

Figure I-5

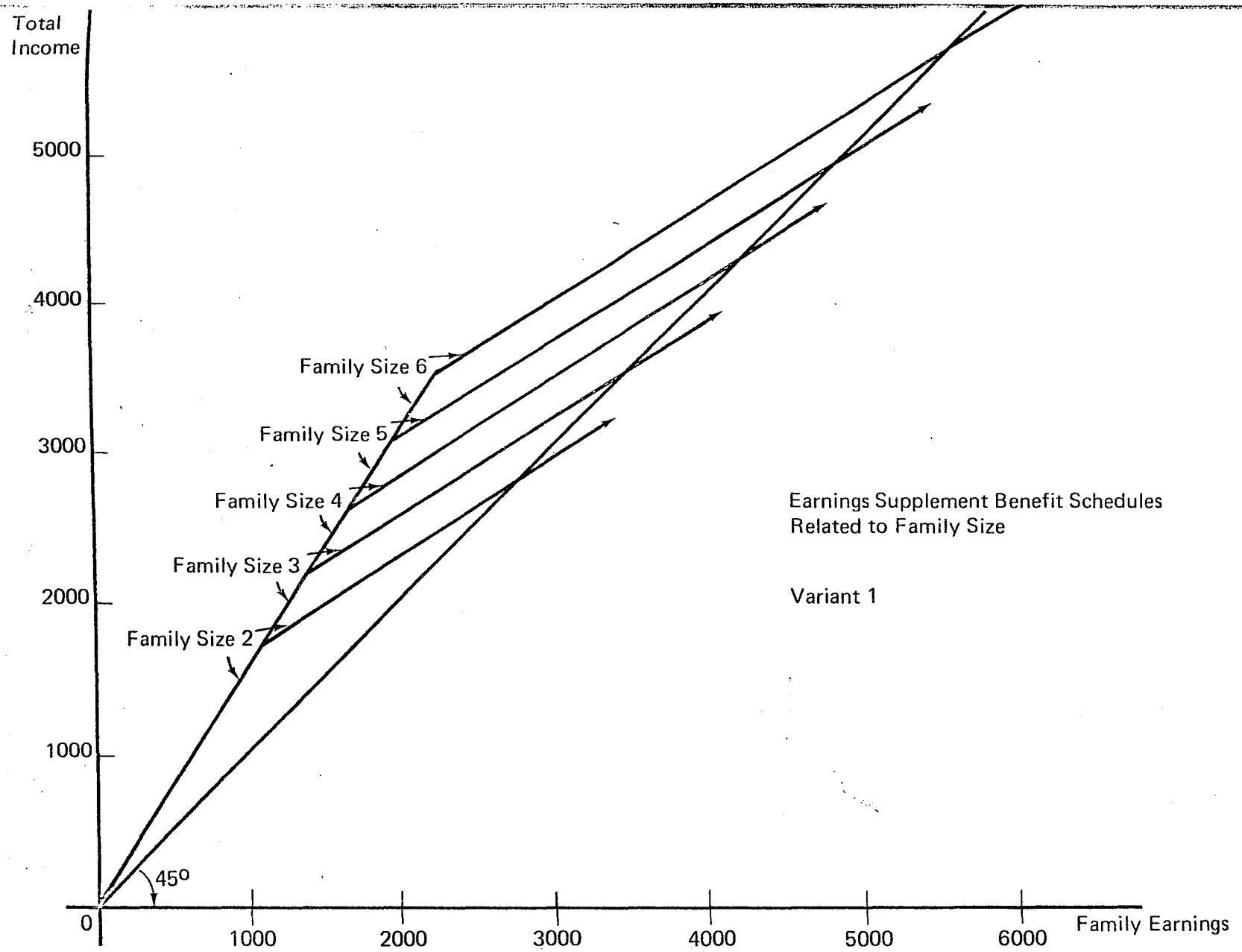
Total Income
5000
4000
3000
2000
1000
0
Family Size 6
Family Size 5
Family Size 4
Family Size 3
Family Size 2
45°
1000
2000
3000
4000
5000
6000
Family Earnings
Earnings Supplement Benefit Schedules
Related to Family Size
Variant 1

Figure I-6.

D. The British Tax Credit Plan[20]

The plan proposed for adoption by the British government is a modification of the negative income tax structure into a work-conditioned income supplement plan. In the British plan, all earnings--defined to include pension benefits and social and unemployment insurance benefits--are taxed at a single rate of 30 percent. If a worker (with, say, 3 dependents) is earning in excess of about $20 per week (£8), he is eligible for a refundable tax credit of about $25 per week (£10). Thus, if he earns £10 per week, his income after receiving the credit and paying the tax is £17 (£10 - £3 + £10). If he earns £20 per week, his total income (including the credit) is £24 (£20 - £6 + £10). In effect the plan is a negative income tax, eligibility for which requires weekly earnings in excess of about $20 per week. The maximum benefit (for a family of four with $20 per week of earnings) is about $25 per week and the tax rate on earned income is 30 percent. Figure I-7 depicts the benefit schedule for families of 2, 4, and 6. The substantial incentive in this plan for a low income worker to increase his earned income to the £8 minimum eligibility level should be noted.

The British scheme is integrated with the income tax system through withholding process. Employers calculate tax withholdings and the tax credit simultaneously and withhold or supplement earnings on a weekly basis, depending on the calculation. The employer's calculation of the credit due any employee is based on the information on a government issued card presented by an employee to an employer. Because the income tax is a flat 30 percent of income, end of year adjustments because of multiple jobs or earners are minimized.[21]

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[20]See Proposals for A Tax-Credit System, H.M.S.O., London, October 1972.

[21]An important consideration in the evaluation of an earnings supplement program for the United States is the relationship of the program to the income tax withholding system. Clearly, numerous administrative difficulties could be minimized if the supplement and income tax withholding system could be integrated. Such integration would require a major revision in the current withholding system: non-taxable earners would have to be identified, the proper claiming of exemptions would have to be enforced, and, perhaps, the coverage of the withholding system would have to be extended. Because of the advantages of such integrations, these revisions should be seriously considered.

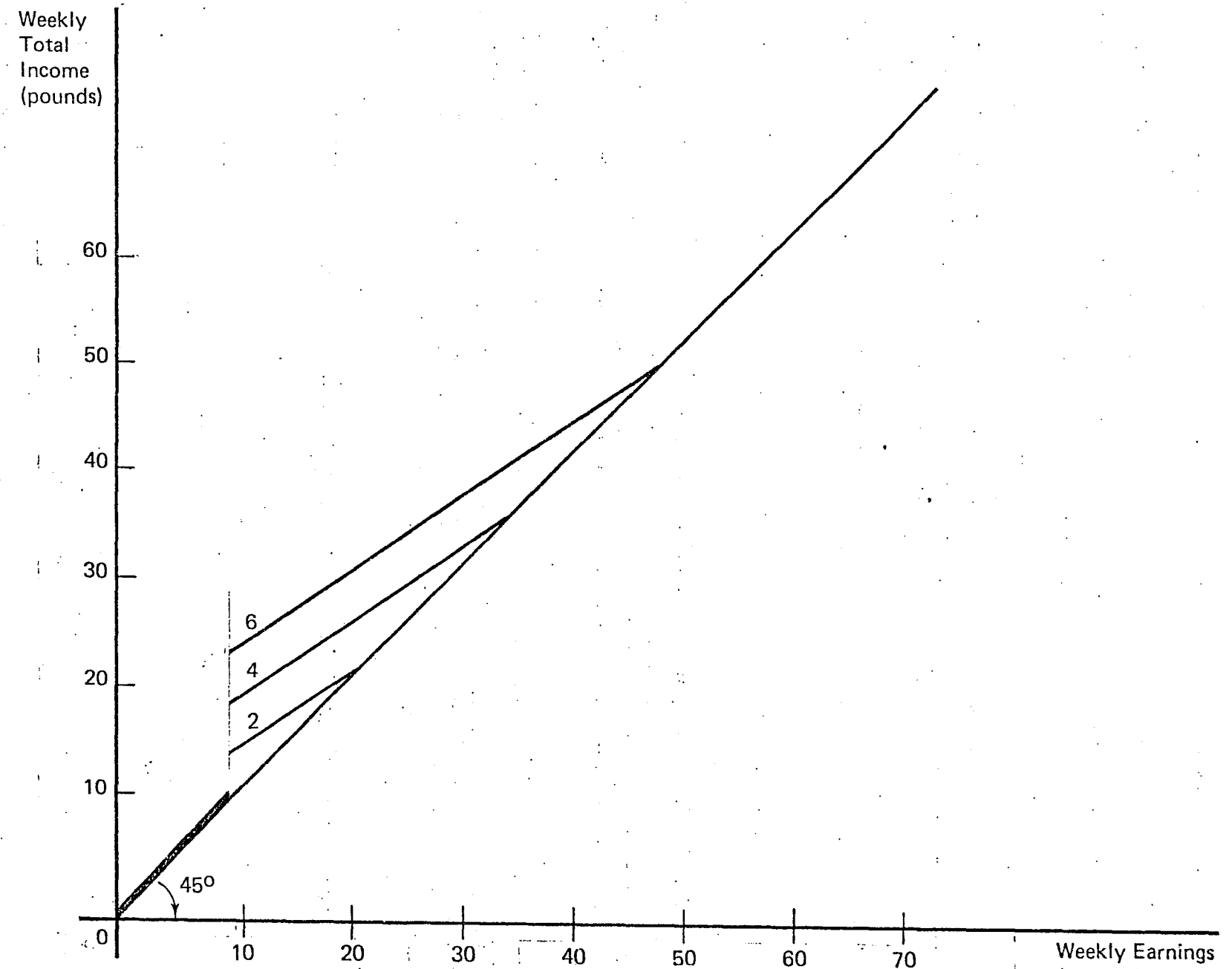
Weekly
Total
Income
(pounds)
60
50
40
30
20
10
0
6
4
2
45°
10
20
30
40
50
60
70
Weekly Earnings
(pounds)

Figure I-7.

II. ISSUES IN DESIGNING AN EARNINGS SUPPLEMENT POLICY

In our exposition of the earnings supplementation strategy, we maintained certain assumptions about the scope of the program: that the program was family oriented, that the sum of husband's and wife's earnings was used to determine the size of the supplement, that the accounting period was a year, and that provisions in other transfer programs would carry the burden of integration. In this section we shall explore these issues more deeply.

A. The Recipient Unit: Who is Eligible?

We accept as a basic premise that the family, or household, is to be the recipient unit, whether or not the supplement schedule is a function of family size. For income- or earnings-conditioned programs, the alternative of considering each income-earning individual as a separate unit makes the program less effective in channeling support to the poor. For example, with a universal wage rate subsidy, secondary earners in distinctly non-poor families would be major beneficiaries.[22] The acceptance of the family as the basic recipient unit is consistent with much current thinking about poverty definitions and social policy,

A crucial question is whether all family units with incomes below some level are to be eligible for the program or whether certain families would be made categorically ineligible. A "family," in the sense used here, is a household unit: an unrelated individual, a couple with no children, a couple with two or more children, and a single mother or father with children are all examples of "families" in our definition.[23] One possibility would be to restrict eligibility to only those families with children, as has been the case in the AFDC and AFDC-UP programs and in the proposed Family Assistance Program. A second might be to restrict eligibility further, to only those families with both husband and wife present. A third would be to make certain "irregular" families ineligible.

At least two reasons can be put forth to restrict eligibility to families with children. First is the social philosophy that adults do not "deserve" income maintenance, but that children do because they are dependent persons. Second, and related to the first, is the notion that families with children have a higher priority of need and that wide eligibility would increase program costs to a politically unacceptable level.

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[22] See Michael Barth, "Universal Wage Rate Subsidy: Benefits and Effects," op. cit.

[23] The official Census Bureau definition of "family" is narrower than this, as it excludes unrelated individuals.

The main argument against restricting eligibility to families with children is based on equity grounds. Since the philosophy behind the earnings supplement is to help the working poor, a "children test" could only result in inequity. It may well be thought that families with children are more needy, and this may be true on average. However, need and well-offness are determined by many other factors, and a case-by-case determination is superior to use of an arbitrary children-present criterion as a tool for categorization. Indeed, the considerable horizontal inequity which results from the current patchwork system of categorical public transfers is one of the basic reasons why "welfare reform" is so important.

In addition, making all family units eligible for the supplementation program results in a savings of administrative costs and in a reduction of both the incentive for illegal behavior ("welfare cheating") and behavior designed to achieve eligible status (such as having children).

A variation on restricting eligibility to families with children is to restrict it further to families with both husband and wife present. The arguments for this might be further cost savings, as well as the presumption that one-parent families are taken care of by AFDC. This is an imperfect presumption, however, as it is not possible to make another program dovetail perfectly with a state administered AFDC system with wide variation in eligibility determination and benefit levels. Needless inequity is likely to result from this further categorization.

A third possible restriction would be to make certain "irregular" families ineligible. Most commonly, it is suggested that various one-person families might be excluded for social or political reasons: students, young drifters, prisoners, soldiers, members of religious orders, etc. For the young, it has been suggested that a minimum age requirement of 21 or 25 be required--with an allowance for young persons with children. The reasons for excluding these persons are not so politically pressing as they would be with a negative income tax or any other program with an income guarantee, however. Also, since these persons' earnings are subject to various forms of taxes, they might be entitled to an earnings supplement under "equal protection" laws.

It is our view that the best criterion for eligibility is the widest: that all types of family units be eligible. As noted in Appendix A, there are a large number of families with no children who have low incomes, and would therefore receive benefits. To be equitable and to make the program poverty-effective, an earnings supplement with wide eligibility should be designed with family-size conditioned benefits.

B. Treatment of Earnings and Other Income

1. Definition of Earnings

Earnings would be defined comprehensively to include wages and salaries and self-employment income. The definition should conform to

Internal Revenue Service criteria, on grounds of simplicity. Of course, this is not a simple task, especially for self-employment income.

Under existing public assistance and proposed negative income tax programs, as well as the individual income tax, there is an incentive for persons to minimize the amount of reported earnings. This incentive would apply also under an earnings supplement to those families with earnings above the kinkpoint. However if total earnings are below the kinkpoint, the recipient unit is better off if it can report high rather than low earnings. This might encourage various forms of new market activity to blossom. For example, two families with zero earnings today might exchange housecleaning chores on an employment basis, in order to generate "earnings."

A related problem is whether earnings should be defined as gross, or net, of work expenses. Families with earnings above the kinkpoint would get a larger supplement if they report net earnings, while families below that level of earnings would prefer to report gross earnings. Also some families with gross earnings above the breakeven level would receive benefits if work expenses were netted out. Simplicity argues for basing the supplement on gross earnings.

2. Whose Earnings?

Assuming that the "family" is adopted as the recipient unit, three alternative calculations of the earnings figure to be supplemented can be distinguished: (1) the combined earnings of husband and wife, (2) the earnings of only one member, and (3) the earnings of all individual family members, separately.[24]

For discussion, consider a particular supplement schedule, say Plan B described in Part I, which might be used under all approaches. The relative generosity of alternatives (1) and (2) depends on the amount of earnings in the family, and its distribution among the individual earners. However, alternative (3), using the same schedule as (1) and (2), would be preferred by all recipient families: they could never be worse off. Therefore, if single adults are eligible for the supplement, alternatives (1) and (2) would create an incentive for some families to split or to give the appearance of splitting.

The first alternative would be the most efficient in targeting benefits to low income households: the supplement is limited to families with earnings below the breakeven point. Under (2) or (3), supplements would be given to families with total earnings above the breakeven level. Alternative (3) would make the largest payments to nonpoor families, and would be the least target-efficient.

Choice among these alternatives depends on specification of more policy criteria, but alternative (1) seems the most appropriate for the design of policy with a strong anti-poverty objective.

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[24] Option 3 is tantamount to making the program individual-oriented rather than family-oriented, unless benefits are family-size conditioned.

3. Treatment of Other Income

Income other than earnings presents severe difficulties for the design of an earnings supplementation program. In an extreme form, the program would supplement earnings without regard to other income. This opens the program to considerable criticism, however, as persons with large amounts of property income but small earnings will be receiving a supplement. To make the program more poverty-effective, and politically acceptable, some adjustment might be made for unearned income.

First, it is possible to isolate certain sources of income which might be called "quasi-earnings." In concept, this is income which takes the place of earnings missed due to sickness or unemployment and which is received by right of contract or insurance paid for through foregone earnings. Specifically, certain employer-paid income continuation plans as well as unemployment insurance fit in this category. In a meaningful sense, this income has been "earned," but its payment has been delayed and made contingent upon other circumstances. Thus, this income could be appropriately included in a broadened definition of earnings used to determined the earnings supplement. With this inclusion, some recipients would be better off, some worse off.

Second, there are a number of income-conditioned government programs, such as Public Assistance, Social Security, public housing, Medicaid, etc., which provide transfer income to families. As discussed below, it is probably desirable that these programs carry the burden of integrating the earnings supplement into the entire tax-transfer scheme. Thus, the determination of earnings supplement benefits could ignore this source of income.

Finally, all other income can be defined as "unearned income," typified by property income in the form of rents, interest, dividends, etc. If the amount of unearned income received by a family is treated the same as earnings in the determination of the supplement, the program becomes an "income supplement" rather than an earnings supplement. This is more important than simply a change in name: the principles upon which we might want to design an income supplementation program may be different from those for an earnings supplement, and the relevant criteria for policy evaluation also may be different. We shall consider several options for treating unearned income in the context of an earnings supplementation program.

One method of treating unearned income would be simply to deny eligibility to families with income from these sources above some prescribed amount. No matter where this limit is set, however, an inequitable notch will result. Families with unearned income just one dollar below the limit will be eligible for the earnings supplement, while those with unearned income one dollar above it will be ineligible. Families just above the limit are, in effect, taxed at a very high rate on the last dollar of unearned income.

A more equitable solution would be to tax unearned income in determining the earnings supplement; that is, to reduce the supplement benefit by some fraction of unearned income. Two illustrative alternatives are shown in Table II-1 for a family with $2,000 of earnings under Earnings Supplement Plan B. Option 1 taxes unearned income at 100 percent by reducing the benefit by a dollar for every dollar of unearned income. This seems unduly harsh: a family with unearned income greater than its scheduled supplement benefit gets no benefit even though it may be poor. Option 2 exempts the first $2,000 of unearned income and taxes the remainder at 50 percent. The leakage of the earnings supplement to the non-poor would not be large, and households with unearned income would be treated more equitably. Some version of this alternative seems preferable; the exact size of the exemption and the tax rate could be chosen after examining data on the joint distribution of the earned and unearned income of families. It should be recognized that alternative treatments of unearned income not only affect the size of benefits in different ways, but also the number and composition of families receiving benefits.

4. Treatment of Assets

Most existing income-conditioned transfer programs include some assets test: if the family's assets are greater than some stipulated amount, the family is ineligible for the program. If the earnings supplement is to adjust for unearned income, then the level of family assets should also be considered.

An innovative expedient would be to include in the computation of "unearned income" some imputation of the in-kind income received from assets. For example, the rental value of a fully-owned home would be counted as unearned income. For some assets, such as savings accounts, income is already reported as interest, and should not be double-counted. The benefits of this treatment of assets would be to eliminate the notch effect of assets tests, and to recognize the similarity of human and physical wealth.

C. The Accounting Period

The earnings supplement would be based on the earnings received during some specific period of time. Should this time period, or "accounting period," be a week, month, quarter, or year? If all workers' earnings were spread evenly throughout the year, the accounting period would have no effect on the size of the benefit. However, if earnings are not received uniformly, the choice of accounting period can affect the overall benefits. Given the irregular work experience of low income families, the accounting period can make a considerable difference in the benefits received by many families. The accounting period is a greater problem in this program than in others because of the kink in the supplement schedule. We shall illustrate these points by comparing quarterly and yearly accounting periods.

TABLE II-1. ALTERNATIVE TREATMENTS OF UNEARNED INCOME UNDER EARNINGS SUPPLEMENT PLAN B

Option 1: The earnings supplement is reduced by one dollar for every dollar of unearned income.

Option 2: The first $2000 of unearned income are ignored in calculating the earnings supplement. The earnings supplement is reduced by $.50 for every dollar of unearned income above $2000.

			Option 1		Option 2	
Earnings	Unearned Income	Total Family Income	Benefit-1	Income-1	Benefit-2	Income-2
$2000	$ 0	$2000	$1000	$3000	$1000	$3000
2000	1000	3000	0	3000	1000	4000
2000	2000	4000	0	4000	1000	5000
2000	3000	5000	0	5000	500	5500
2000	4000	6000	0	6000	0	6000
2000	5000	7000	0	7000		7000

Considering Plan B as the yearly benefit schedule, the comparable schedule for a quarterly period would have pivot and breakeven earnings levels equal to one-quarter of their respective values in Plan B. Table II-2 shows this relation. Note that the supplement and tax rates prevailing below and above the kinkpoint, respectively, are the same under both accounting systems.

If a family's earnings were below the pivot point in every quarter, then the choice of accounting period would make no difference in the benefits paid. Similarly, if a family's earnings were always between the pivot and breakeven levels, the choice of accounting period would make no difference. However, if during some quarters, family earnings were above the quarterly breakeven level, but during other quarters earned income between the pivot and breakeven levels, then the accounting period problem would be the same as that under the negative income tax: the yearly benefit would be less than the four quarterly benefits. However, through a carryover accounting system, these two amounts could be made equal, thus neutralizing the problem of incentives in the timing of income present in the shorter accounting period.

The real difficulty arises when the family's earnings are below the pivot point in some quarters of a year and above it in others. Under an earnings supplement the yearly accounting period could award greater benefits to the family than would the quarterly accounting period,[25] even though the benefit schedules were equivalent. For example, consider a family which earns $1,000 in each of the first two quarters and nothing in the second two, for an annual income of $2,000. If the accounting period were the year, its annual benefit under Plan B would be $1,000; if the accounting period were the quarter, the family would receive benefits of $83 in each of the first two quarters and none in the second two, for an annual total of $166. To this family, the choice of accounting periods makes a difference of $833. In this case, the simple carryover accounting system will not equalize the yearly and four quarterly benefits.

Overall, a short accounting period would grant smaller annual benefits to families whose earnings vary considerably during the year than to those whose earnings are more uniform. This horizontal inequity cannot be eliminated by using a single carryover accounting system such as that proposed in the Family Assistance Plan. Appendix B explores this matter in more detail. On equity grounds then a yearly accounting period would be preferable to a simple quarterly accounting period, unless some new effective accounting system can be developed.

The major advantage of a short accounting period results from the short payment period which is naturally associated with it. Timely provision of benefits when earnings are unusually low makes the program more responsive to the needs of recipients. However, it should be possible to have the esirable short payment period regardless of the length of the accounting period through some end-of-year

[25] This can never occur under a negative income tax.

Table II-2. Earnings Supplement Plan B with a Yearly and a Quarterly Accounting Period

Yearly Accounting Period		Quarterly Accounting Period	
t = +.5 up to $2000 t = -.33 between $2000 and $5000		t = +.5 up to $500 t = -.33 between $500 and $1250	
Yearly Earnings	Yearly Benefit	Quarterly Earnings	Quarterly Benefit
$ 0	$ 0	$ 0	$ 0
1000	500	250	125
2000	1000	500	250
3000	667	750	167
4000	333	1000	83
5000	0	1250	0

settlement procedure. Although this would involve some administrative complexity, it would appear to warrant further study.

Finally, it should also be noted that the choice of accounting period affects work incentives by altering the supplement or tax rates affecting the family. For example, consider a very low income family whose earnings are concentrated in certain seasons of the year. In these periods, the family would confront the tax rate which prevails beyond the kinkpoint. For this family, a short accounting period reduces the incentive to work more during the period of concentrated work effort. However, it increases the incentive for them to work more periods since they can renew their eligibility for the supplement in each period. One effect of these changes in incentives will be to reduce the seasonality of employment, given the constraints of weather, etc. This will tend to counter the effect of Unemployment Insurance, which creates an incentive for employers to increase seasonal fluctuations in employment.

D. Integration with Other Programs

Experience over the past few years has taught us that a major stumbling block to enactment of a proposed program is the problem of integrating it with existing programs and with other proposed programs. Hence, part of the evaluation of any new proposal should be an analysis of how it can be merged with the entire existing tax-transfer system. Two important problems come up in considering issues of program integration: horizontal equity and work disincentive.

The equity problem is a direct result of the tax-transfer system being a patchwork of single purpose programs, each created with a narrow perspective. Under this system, the extent of public aid received by a family depends not only on its earnings and needs, but also on a host of fortuitous conditions relating to geography, demography, and chance. Those inequities cannot be remedied by one program such as an earnings subsidy, but care can be taken not to make matters worse.

The problem of work disincentive arises from the fact that if a family receives aid from a number of programs in which benefits are income-conditioned, the implicit tax rates cumulate to high levels. Workers in the family find that the family's well being is increased only slightly if they work more, because the various assistance benefits are decreased. In some cases, families find that their real income decreases if they earn more money--i.e., the implicit marginal tax rates cumulate to over 100 percent. One aim in integrating income-conditioned programs is to keep this cumulative tax rate as low as possible. In a work-oriented program such as the earnings supplement, this should be of special concern.

A host of other considerations which come under the heading of integration cannot adequately be discussed here. These include questions of definition of benefit units, payment periods, and administrative feasibility. The resolution of those questions is important in

determining the distributive effectiveness of the program, and also has an impact on equity and work incentive considerations.

A basic step in integrating programs is determining how each program counts the benefits received by all other programs in computing its net benefit. Certain problems of simultaneity can easily arise. One way to think about the structure of the tax-transfer system is to view programs or blocks of programs operating in sequence. In this analysis we propose placing the earnings supplement at the beginning of the sequence: the program determines its benefits on the basis of earnings and unearned income, and ignores other taxes and transfers (except, perhaps, those counted as "quasi-earnings," as noted above). This position is a natural consequence of the earnings supplement being a program of broad eligibility and general purpose. Other programs with narrow eligibility and special purpose are placed later in the "sequence," and must take some account of the earnings supplement. While this approach is not the only way to link the programs and it does not cover all aspects of integration, it provides considerable control over the problems of horizontal inequity and high cumulative marginal tax rates.[26]

1. AFDC for Female Headed Families

AFDC is the most important categorical public assistance program in operation. If female headed families are made eligible for the earnings supplement, some plan for AFDC's treatment of the supplement must be made. We shall examine three options for integrating a typical state's AFDC program with the Plan B earnings supplement, assuming a guarantee of $3,000 and application of the "Thirty and a Third Rule" for AFDC, and assuming zero unearned income. In Figure II-1 we show total family income when only the earnings supplement is available, and also when the family is on AFDC under the three options.[27]

Option 1. The supplement is counted as unearned income and taxed at 100 percent, the normal AFDC tax rate on unearned income. In this option, total AFDC program costs are decreased, and fewer families will be on AFDC because families leave the program if their earnings go above $4,720, rather than $4,860. While participating in the AFDC program, a family is no better off after the introduction of the earnings supplement than before it, but if its earnings rise above $4,720 the family will leave AFDC and be better off than before.

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[26] For a fuller discussion of ways to integrate the benefits of several income-conditioned programs, see Thad W. Mirer, "Alternative Approaches to Integrating Income Transfer Programs," Studies in Public Welfare (Paper No. 4), Joint Economic Committee, 1972.

[27] The total income line of the AFDC program operating in the absence of an earnings subsidy coincides with the line labelled "option 1" up to an earnings level of $4,720. The AFDC-only line would be an extension beyond this level, while option 1 "turns up" here.

Option 2. The supplement is counted as earnings, and taxed at 66-2/3 percent, the AFDC tax rate on earnings. AFDC program costs are decreased, but less so than under Option 1. While participating in the AFDC program, a family is always better off under Option 2 than before the introduction of the earnings supplement except for families with zero earnings. As earnings rise above $4,790, the family will leave AFDC and be better off than before.

Option 3. In this option, the supplement is ignored in calculating AFDC payments. AFDC program operations and costs remain the same as before the earnings supplement. Families are better off or at least as well off as they would be under any other option.

In terms of generosity, option (3) is better than (2), which is better than (1), which is much better than the earnings supplement alone. On equity grounds, the different treatment between a family on AFDC and an equally needy one not on AFDC may be hard to defend; option (3) presents the worst equity result, and option (1) the best.

The cumulative marginal tax rates are important for the work incentive resulting from the combination of AFDC and the earnings supplement. In Figure II-1, the flatter the slope of a total income line, the greater is the cumulative marginal tax rate at that particular amount of earnings. Option (3) results in the lowest tax rate for families with earnings less than $2,000, but the highest for families with earnings above $2,000. The opposite holds for option (1), while option (2) is intermediate in both cases. Thus, no single option is unambiguously better than the others in terms of work incentive.

2. AFDC for Families with Unemployed Father

AFDC for families with an unemployed father, known as AFDC-UF provides income assistance to families in which the father does not have a regular full-time job. It provides in income floor, or guarantee, and family earnings are taxed at a 2/3 rate. However, if the father works more than 100 hours per month, the family is ineligible for program benefits, creating a notch effect. Currently, fewer than half the states operate this program, creating horizontal inequities among families in the various states.

The problems associated with the notch effect and interstate inequity would be mitigated to some extent by the earnings supplement.[28] Option (1) for AFDC, which taxes the earnings supplement at 100 percent, would be the most effective in mitigating these problems:

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[28] Because of the similarity of the eligible population of both the AFDC-UF and earnings supplement programs, plans for integrating the two programs could be extended to considering reform of the incentives and inequities in AFDC-UF. Given the importance of these problems, this should be seriously considered.

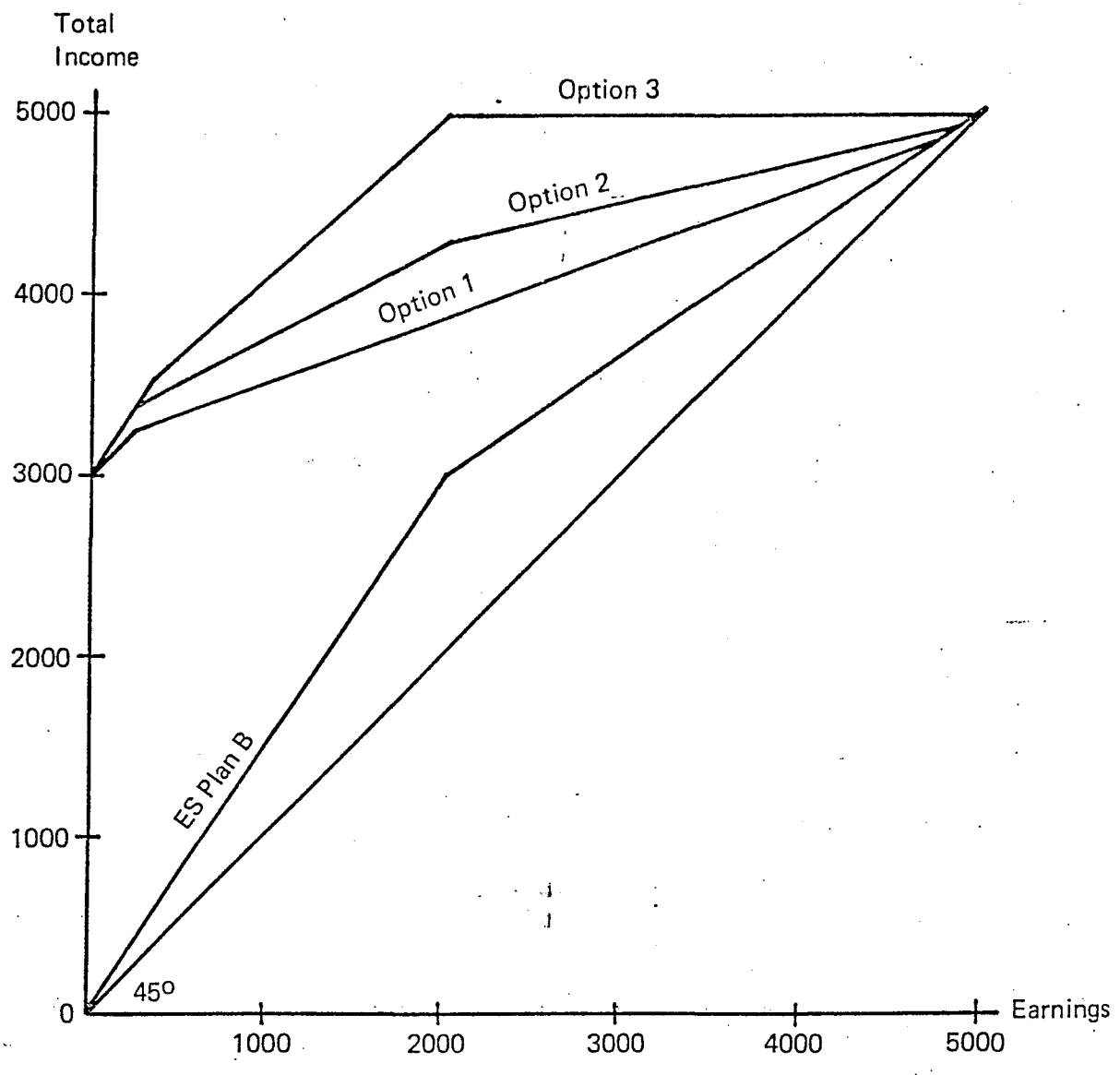

Figure II-1. Alternative Treatments of Earnings Supplement Plan B by AFDC

interstate inequities would be the smallest, and the "tax" imposed on families for working more than 100 hours--i.e., losing program eligibility would be the least. For example, using the benefit schedule of the typical AFDC program described above, a father earning the minimum wage of $1.60 an hour and working 100 hours per month would earn $1,920 per year and receive AFDC-UF benefits of $1,960. If he were to try to work a few more hours, he would lose all of this $1,960 under current law. If earnings supplement Plan B were in force, with integration option (1), his removal from AFDC-UF would reduce his net income by $1,050 rather than $1,960.

3. Unemployment Insurance

Unemployment insurance is basically a state-run program which ties its transfers and "taxes" very closely to individuals' wage earnings. While it is conceivable that UI might base its taxes and benefits on a supplemented gross earnings concept, this procedure would present substantial administrative difficulties.

About five percent of total UI benefits are paid to persons with earnings: while recognized as being unemployed, these workers are able to obtain some part-time employment. In most states, these earnings are taxed at 100 percent. Under an earnings supplement these earnings would be supplemented, but there would seem to be no reason for this supplement to be taxed away: UI could appropriately view the supplement as current unearned income.

4. The Individual Income Tax

Some families which receive the earnings supplement may also be liable for income taxes. The number of such families is likely to be relatively small, both because earnings levels of recipients are fairly low and because family-size conditioned breakeven levels can be made close to the income tax breakeven levels.

There is considerable precedent for excluding earnings supplements from taxation. The Federal income tax currently excludes Public Assistance, Social Security, Unemployment Insurance and certain other government transfer payments from the tax base. To include the earnings supplement in taxable income would put recipients at a disadvantage relative to recipients of other types of government transfers.

On the other hand, precedent need not rule. If the income tax is to be based on the ability of families to pay taxed then the supplement ought to be included in taxable income. Moreover, if the accounting period of the earnings supplement is less than a year, the different treatment accorded families with concentrated earnings and families with uniform earnings would be somewhat diminished by inclusion of the supplement in taxable income.

5. Other Programs

The examples given here indicate the range of problems and considerations which need to be taken into account in integrating an

earnings supplement with existing programs. Other programs such as food stamps and public housing implicitly define a "countable income" which they use to determine benefit levels and eligibility. If the earnings supplement is considered to be countable income, then the total costs (and benefits) or these programs will be decreased, and eligibility will be narrowed. If the supplement is not considered to be countable income, program costs remain the same. Horizontal equity is better served by the first alternative, while the prevention of high cumulative marginal tax rates is better served by the second.

E. Further Issues

1. Administration

The nature of the administrative problems involved with an earnings supplement depend on the policy decisions on the issues addressed above. The simplest administration would be through the Internal Revenue Service, making only end-of-year payments. With some complication, the supplement could be paid intermittently, and accounts could be balanced at the end of the year. If the program is to have a shorter accounting period than a year, and if more frequent payments are desired, a new office in DHEW or Labor might be organized.

While we recognize the importance of many administrative problems, a fuller discussion of them is beyond the scope of this paper.

2. Public Employment

In previous analyses of wage or earnings subsidies, a large public employment program has been considered a necessary complement to income supplementation. So long as the categorical programs of income maintenance (AFDC and SSI) are maintained, however, an earnings supplement without public employment provides an improvement over the current situation. It does not, however, make the national poverty policy comprehensive or ideal.

The underemployment (or, excess supply) of low skill workers, which is considered by some economists to be characteristic of the current U.S. economy, prevents the earnings supplement from aiding the working poor in a fully equitable manner. In a market with underemployment, the distinction between those who work as much as they want and those who cannot find all the work they are willing to do is often arbitrary or based on luck. In a sense, all those who are willing to work are equally deserving of income support. Minimizing this inequity could be achieved by the creation of additional low-skill jobs in the public sector.

3. The Minimum Wage

While no operation or application of the minimum wage law need take account of the earnings supplement program, its implementation will allow a re-thinking of minimum wage legislation. If the minimum is viewed as being important for social reasons as a take-home wage, then implementation of an earnings supplement might be viewed as a

substitute for further rises in the minimum wage. To be a good substitute, the earnings supplement would have to be as nearly universal as possible--all workers or working families would have to be eligible. In fact, the earnings supplement might be even more redistributive than a higher minimum wage law, because it would cover workers not now included.

However, if the effect of the earnings supplement is to increase aggregate labor supply, or even the supply in any local labor market, then wages will tend to be depressed and workers not benefiting from the supplement program might be made worse off. An increase in the minimum wage might be proposed to eliminate this equity effect. It should be emphasized, however, that there will be a small number of workers who would simultaneously not be eligible for the earnings supplement and be benefited by an increase in the minimum wage.

III. LABOR MARKET EFFECTS

In this section the expected labor market effects of an earnings supplement program are analyzed. The analysis focuses on workers' behavioral responses to the program and on the attendant market adjustments. Much of the analysis depends in a crucial way on empirical judgments about labor force behavior and labor market operations. These will be noted and alternative possibilities indicated.

A. Static Labor Market Effects

The impact of an earnings supplement on labor market conditions can be analyzed in terms of supply and demand. The direct effect of the earnings supplement program is to alter the supply side of the market because the supplement changes the rewards available to persons for actually being employed. However, the final effects depend on the nature of the demand side of the market and the processes by which the adjustments are made.

The standard labor supply analysis used to evaluate the impacts of alternative income maintenance strategies (including public assistance, negative income tax, and wage subsidy programs) assumes rational self-interested decision making on the part of workers and employers, and automatic market adjustments. It is assumed that each worker knows with certainty the wage available to him in the market for as many hours as he wants to work. His decision between work and leisure, which determines his earned income, is sensitive to the value of the wage rate facing him and the value of any income guarantee which might be offered him. In application, the theory is used to explain not only how many hours each individual seeks to work, but also whether or not he seeks any work at all. While the analysis is phrased in

terms of individual workers, it should be understood to apply to the family unit decision making process.[29]

In Figure III-1 we again show the earnings supplement schedule as the heavy kinked line ODE relating "earnings plus supplement" to "earnings." We identify two ranges of income: $0 to $A, which is labelled the "Incentive Range"; and $A to $B, which is the "Disincentive Range." Earnings level $A corresponds to the "pivot point," and $B to the "breakeven point"; the actual earnings levels corresponding to $A and $B depend on the benefit schedules of the program. In the incentive range, the worker receives a supplement which increases in proportion to his earnings; in the disincentive range, he incurs a "tax" on each addition to earnings which diminishes the amount of supplement he receives.

The effect of an earnings subsidy on work incentives depends on the range of income in which the worker finds himself. In the disincentive range the worker reacts as he would under a negative income tax type program, labelled ODE in Figure III-1, which overlaps the earnings supplement in this range.[30] The worker may be expected to work less because the substitution and income effects are of the same sign: his income loss for working one less hour has been lowered, and his total supplement provides an income cushion that may lead him to choose more leisure, i.e., to work less.[31] Preliminary results from the urban negative income tax experiment suggest that this decrease in work effort will be relatively small. In the incentive range, the worker faces the same situation as he would under a simple wage subsidy.[32] Whether the worker will work more or less is theoretically

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[29]The assumptions that the family is the decision making unit and that the earnings supplement is aimed at total family earnings underly the analysis which follows. Further work is needed to investigate labor market effects under alternative assumptions, especially concerning the behavior of secondary earners in the family. For example, in families with a primary and a secondary worker, an earnings supplement program which applies only to the head of the family would create an income effect for the secondary worker leading to reduced work effort.

[30]This is so unless the worker would contemplate non-marginal changes in work effort, such as retiring from the labor force. In this case, the guarantee of the negative income tax would provide an incentive for reduced work effort not present in the earnings subsidy.

[31]For a standard static analysis of the work incentive effects of a negative income tax, see Christopher Green, "Negative Taxes and Monetary Incentives to Work: The Static Theory," Journal of Human Resources (Summer, 1968).

[32]For a standard analysis of the work incentive effects of a simple wage subsidy, see Jonathan Kesselman, "Labor-Supply Effects of Income, Income-Work, and Wage Subsidies," Journal of Human Resources (Summer, 1969).

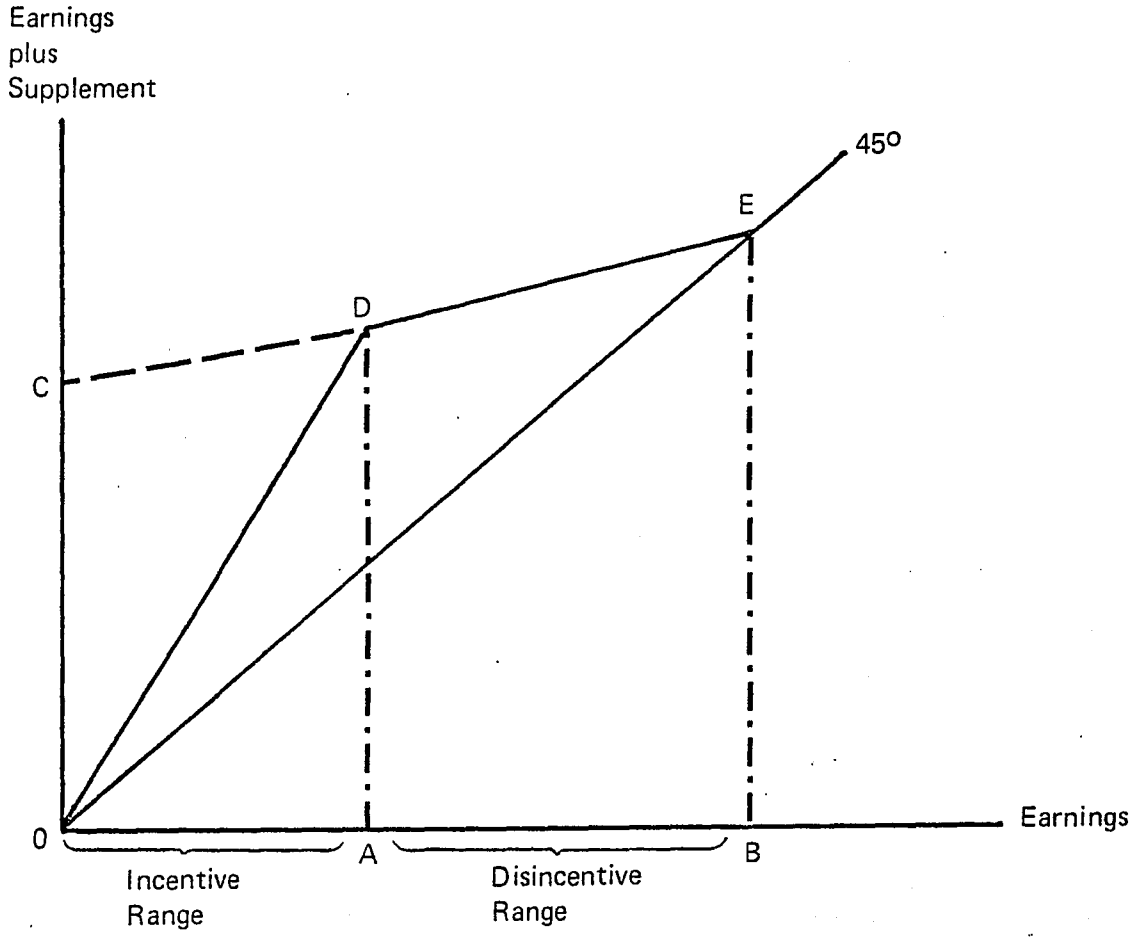

Figure III.1. An Earnings Supplement

ambiguous because the substitution and income effects are of opposite signs, but he will work more than he would if the negative income tax program labelled CDE were effective in this range. Empirically, the question comes down to whether the worker's labor supply curve is positively or negatively sloped. The evidence is ambiguous on this question, but does suggest a backward bending curve for wages above $2.50 or so.[33] For potential workers not currently in the labor force, who therefore are at the bottom of the "incentive range," the earnings supplement unambiguously leads to a greater likelihood that they will participate in the labor force. The remuneration to all levels of work effort is increased up to the breakeven point. While the combined effect is ambiguous, we have labelled the range $0 to $A the "incentive range" because workers have more incentive to work if their earnings are in this range than if they are in the disincentive range, other things being equal.

Referring to appendix table C-1, we find that if the target population of the earnings supplement program is taken as all family units (including unrelated individuals) which earn less than $5,000, about 64 percent will have earnings below $3,000 and about 50 percent below $2,000. Thus, under plans A and B, at least half the target families will be in the incentive range. About 20 percent of the families now have zero earnings and some of them will begin working in response to the earnings supplement. Under an earnings supplement with a lower kinkpoint, a smaller percentage would be in the incentive range.

If the target population is restricted to families with children--reducing the number of eligible family units from 10.5 to 3.4 million--we find that about 58 percent have earnings below $3,000 and about 43 percent below $2,000. Thus, when this restricted group is taken as the target population, a greater proportion is given a work disincentive than with the program with wider eligibility.

In any case, the proportion of earnings supplement recipients subject to a definite work disincentive will be large. Whether the remainder will be subject to an absolute incentive or disincentive needs further research, as does the question of the overall effect. In addition, whether the earnings supplement provides a greater or lesser work incentive than either a negative income tax or a wage subsidy cannot be answered in general, but depends on the particular program parameters specified.[34]

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[33] Glen G. Cain and Harold W. Watts, Econometric Studies of Labor Supply (Chicago: Markham Publishing Co., 1973).

[34] It should be noted that the possible decrease in labor supply which might occur under an earnings supplement is different in nature from that which might occur under a negative income tax. Under a negative income tax, some families might be given the incentive to withdraw totally from the labor force, subsisting on the income guarantee. Under an earnings supplement or a wage subsidy program the absence of an income guarantee would provide no incentive to withdraw from the labor force. Moreover, for a negative income tax which related to the earnings supplement as in Figure III-1, an additional disincentive would exist throughout the lower earnings range due to the tax rate on earnings (rather than the supplement rate) which prevails throughout the range.

If, on balance, aggregate labor supply decreases in response to an earnings supplement, wages will tend to increase and aggregate employment will tend to contract. Employers of the poor will find themselves paying higher wages than in the absence of the program. Poor and near-poor workers who are not covered by the supplement, but who hold similar jobs, will find themselves better off. At least in principle, the repercussions would be felt throughout the economy, as employers substitute higher skill labor and capital for low skill labor.

If aggregate labor supply increases, the opposite effects will occur. As wages decrease, poor and near-poor workers who are not receiving the supplement will find themselves adversely affected. All of the effects, however, may be mitigated if the minimum wage law keeps the market from fully adjusting. Also the quantitative effects of either a decrease or an increase in labor supply depends on the nature of labor demand: if demand is highly elastic the wage rate effects will be smaller than if demand is relatively inelastic.

Regardless of the sign of the change in aggregate supply, the differing incentives of the two ranges may cause a shift in the composition of labor supplied to the market. The work effort of families having the very lowest incomes should increase relative to that of families having moderately low incomes. If families in the two ranges are typified by very low skill and moderately low skill workers, respectively, then we might expect the wage gap between these two skill levels to widen somewhat. The wage of the moderately low skill workers will rise relative to that of the very low skilled workers.

In summary, it is not possible to determine without further evidence whether aggregate labor supply will increase or decrease, and hence what the effects on wages and employment will be. In contrast to programs which include an income guarantee, however, the earnings supplement will not lead to any families totally withdrawing from the labor force; it will encourage some persons who are not currently employed to enter the labor force, and it will provide an increase in the return to additional work effort in some earnings ranges in which guarantee type programs impose a tax on earnings.

One final caveat to this analysis of labor market effects should be added. An important feature of the earnings supplement which makes its labor market effects different from those of other programs is the existence of two ranges of earnings with different marginal tax rates. In the preceding static analysis we considered families to be in "equilibrium" in one range or the other, and focused on incentives for marginal change. However, there is considerable evidence that family earnings fluctuate considerably from period to period, especially in the low income levels. Over time, in the absence of an earnings supplement, families shift from one range to another, and their job decisions are likely to be made upon earnings anticipations as well as their current situation. A more detailed analysis of the earnings supplement should take this into consideration.

Finally, it should be noted that the conclusions reached in the standard static analysis of labor market adjustments to shifts in the labor supply schedules have been called into question by some economists. In recent years, theories of "dual labor markets" and "job competition" have appeared. These new views deny the validity of analyzing supply and demand intersections, and suggest that in markets for low income workers supply greatly exceeds demand without causing any tendency for the wage to fall. According to this view, the shifts in supply of low skilled workers which results from an earnings supplement would merely change the degree of excess supply in these markets, without significantly affecting wages or employment for either group. Evidence does not allow firm acceptance or rejection of these theories.

B. Effects on Upward Mobility

In addition to affecting each worker's decision as to how much he will want to work, an earnings supplement--as well as other income transfer programs--will affect the incentive for workers to secure better-paying jobs. The encouragement of upward mobility and job search is important for long run amelioration of the poverty problem, as well as for providing increased income in the current period. The worker's decision to obtain a better job, or to seek training in order to get a better job, depends on many factors in a complex situation. Not only are the parameters of the particular income support program important, but so are the worker's current labor force and unemployment status. Also, the caveat about earnings variablility noted above applies with special force to decisions about long-run plans.

Static economic analysis distinguishes between on-the-job and off-the-job investments in human capital. Before the institution of any program, each worker will carry out investments until the present costs equal the present benefits. Considering the major costs to be foregone earnings and the major benefits to be increased earnings resulting from increased wage rates (over a lifetime), the effects of any supplement program depends on how it affects these two variables.[35]

We consider first on-the-job training, in which the worker temporarily accepts a low wage in order to obtain training which will later result in a higher wage. Under negative income tax and wage subsidy programs, earnings changes due to wage rate changes are subject to a positive marginal tax. Thus, costs and benefits of on-the-job training are equally reduced, and there is no net incentive or disincentive to seek on-the-job training. However, if the after-training wage results in the worker passing the breakeven point of the plan, there will be a positive incentive. Under the earnings supplement, the same effect on training incentives exists if the wage rates do not cause a shift between the incentive and disincentive ranges. However, if the current wage is in the incentive range and the after-training wage is in the disincentive range, each on-the-job training investment would appear less profitable, and less would be undertaken overall.

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[35] See Irwin Garfinkel, "A Skeptical Note on the Optimality of Wage Subsidy Programs," op. cit.

Off-the-job training involves a worker spending less time on the job or removing himself from the labor force for a period in order to develop the human capital to obtain a job at a higher wage rate after training. Under a negative income tax, the incentives would not be changed, because both costs and benefits of this decision are reduced equi-proportionately. Under a simple wage subsidy, the benefits would be affected as under the negative income tax but the costs due to foregone earnings would be increased; thus less off-the-job training would be undertaken. Under the earnings supplement, the effects would be qualitatively the same as those of the negative income tax, if the post-training and pre-training wage rates leave the worker in the same income range. But, if the pre-training earnings were in the incentive range, and the post-training earnings in the disincentive range, then off-the-job training would be discouraged.[36]

Thus, none of the programs offer a net incentive to seek human capital investment (unless the post-training earnings are sufficient to bring the worker above the program's breakeven point). The earnings supplement will create a disincentive for investment if it involves the worker switching over the kinkpoint, because his foregone earnings during investment would be increased while his benefit might be decreased. The wage subsidy discourages off-the-job training, but not on-the-job. The negative income tax appears to have no net effect on investment incentives.

The process of job search without formal human capital investment is formally equivalent to off-the-job training, and the same conclusions hold. The wage subsidy would discourage all workers from seeking a better job, the earnings supplement would discourage some, and the negative income tax would discourage none. This conclusion is true for job search if the worker foregoes earnings to undertake the search in anticipation of higher wages. However, if the worker undertaking the search is without work, the negative income tax would diminish his job search because of both the guarantee and the tax on marginal earnings. Both the earnings supplement and the wage subsidy would provide additional incentive for job-search efforts. This is especially true of the earnings supplement for expected earnings in the incentive range.

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[36] However, for workers not in the labor force, both earnings supplement and wage subsidy plans would provide a greater incentive for the worker to undertake off-the-job training. The negative income tax, however, would reduce the incentive for off-the-job training.

APPENDIX A

Work-Conditioned Income Supplementation: Senate Finance Committee Style

In June, 1972, the Senate Finance Committee announced their version of a welfare reform bill. The "Assistance to Families" provision of this bill emerged after two years of Committee deliberations as a substitute to H.R. 1 which had been passed by the House. Upon its release, the Administration, Senate liberals, and the media denounced the bill as "a $9 billion step backward," as "slavefare," and as "barbaric."

The proposal which drew this response is not a simple and straightforward scheme. While it would reduce the size of the current AFDC program it would not eliminate it. While it would require some current welfare recipients to be employed in order to qualify for income supplementation, it would guarantee success to their efforts to find employment. Moreover, it would provide substantial assistance for child care services to heads of single-parent families who are declared to be "employable." While it would be a less attractive program to some current welfare recipients than the current AFDC program, it would funnel substantial income support to working poor and near-poor families who are now effectively excluded from the nation's income-maintenance system. In describing their strategy, the Committee stated:

> ...Paying an employable person a benefit based on need, the essence of the welfare approach, has not worked. It has not decreased dependency--it has increased it. It has not encouraged work--it has discouraged it. It has not added to the dignity in the lives of recipients, and it has aroused the indignation of the taxpayers who must pay for it...the only way to meet the economic needs of poor persons while at the same time decreasing rather than increasing their dependency is to reward work directly by increasing its value.

The Structure of the Senate Bill

The primary provisions of the Senate Finance Committee proposal are conveniently described by focusing first on the program of assistance to families without an employable head and then on those with such a head. The program, it should be noted, provides no assistance to single individuals or childless couples.

The Program of Assistance to Families without an Employable Head

Under the current welfare system income support through AFDC is provided for female-headed families and those headed by incapacitated fathers and stepfathers which meet the income and asset tests of state welfare systems--about 3 million families. In addition, in about 25 states families headed by long-term unemployed fathers receive support through AFDC-UP.[37] The Committee bill would continue these cash transfer programs only for those single-parent (primarily female-headed) families in which the parent has a child under age 6 or is ill or incapacitated, attending school full-time, or residing in a geographically remote region. About 1.8 million families fall into this category, approximately 60 percent of the current AFDC population.

For this residual AFDC population the Senate bill would require that states with high benefit levels not reduce payment levels below $2400 for a family of four. States with payment levels below this amount could not reduce them at all. In addition, a block grant would be provided states to enable them to raise benefits to this level with no additional cost to them.[38] After disregarding $240 of earnings plus earnings to cover another $240 of child support costs, earned income would be taxed at a 100 percent rate.[39]

The Committee proposal, like H.R. 1, would not provide federal matching of the state supplemental payments. Also, like the Administration proposal, the Food Stamp program would be eliminated for families who are eligible for welfare benefits. However, states could choose to supplement the basic federal program by the amount of the implicit cash value of food stamps to a family (an average of about $800) without incurring additional cost. However, unlike H.R. 1, the Senate proposal does not encourage states to cede administration of the welfare program to the federal government.

The Program of Assistance to Families with an Employable Head

Under the Committee proposal, families with heads who are classified as employable would not be eligible for direct cash transfers unrelated to work. For some of these families--employable female- and male-headed families who are now receiving AFDC or AFDC-UP benefits--this will significantly change their status.

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[37] About 20 percent of all AFDC families are male-headed.

[38] The block grant, however, does not cover costs for benefit levels beyond $2400 even though the family has more than four members. While this appears to be tantamount to a guarantee level of $2400 for a four-person family, it should be noted that some states may well not increase benefit levels, even though costless.

[39] The 100 percent tax rate provision goes into effect only after the employment program (described below) is in operation.

Such family heads, however, are guaranteed a minimum income of $2400 per year (unrelated to family size) provided they participate in the employment program.[40]

The employment program would be administered by a Work Administration (WA) which would be created by the bill. Any eligible family head would be guaranteed a job by the WA. In dealing with registrants in the program the WA would have three options open. First, the participant could be placed by the WA in a regular public- or private-sector job paying $2.00 per hour or more. Full-time work for a year in a job provided by the WA would yield the worker an income of at least $4000 per year.

A second option for the WA would be to place the participant in a regular private- or public-sector job which pays less than the national minimum wage,[41] but more than three-fourths of it. In this case, the WA would subsidize the applicant's wage rate by three-fourths of the difference between his wage rate and the national minimum wage rate.[42]

For applicants who find themselves in either of these circumstances, there is a supplemental subsidy which would be administered by the WA--an earnings bonus. For every dollar earned in employment by the family head and his wife covered by the social security program,[43] an additional 10 percent bonus would be paid, up to an earnings level of $4000. Beyond $4000 of husband's plus wife's earnings, the bonus (which reaches a maximum of $400 at an earnings level of $4000) would be decreased by $.25 for each additional dollar of earnings, hence falling to zero at an earnings level of $5600. The schedule of work-conditioned subsidies related to the earnings of a family head in full-time employment (without a working wife) is shown in Figure 1. Total income for such a family

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[40] Eligibility for the employment program is limited to the heads of families with less than $300 per month of unearned income or $5600 of total family income per year.

[41] Currently, the minimum wage is $1.60 per hour. However, passage of at least a $2.00 minimum wage seems likely. Except where noted, the subsequent discussion of the proposal will assume that the minimum wage is $2.00 per hour.

[42] The formula for this form of wage rate subsidy is: $S = .75(X-W)$, where S is the per hour subsidy, W is the actual wage rate and X is the national minimum or target wage rate. To be eligible for the subsidy $.75X < W < X$. For example, if the national minimum wage rate is $2.00 per hour, and if the applicant is placed in a position paying $1.50 ($1.80) per hour, the WA would subsidize the wage rate by $.375 ($ .15) per hour. From the employee's point of view, his wage rate would be $1.875 ($1.95) per hour, which for full-time work implies an income of $3750 ($3900) per year.

[43] A part of the rationale for the earnings bonus is to eliminate the social security payroll tax for low income workers. The earnings bonus would be administered by the Internal Revenue System.

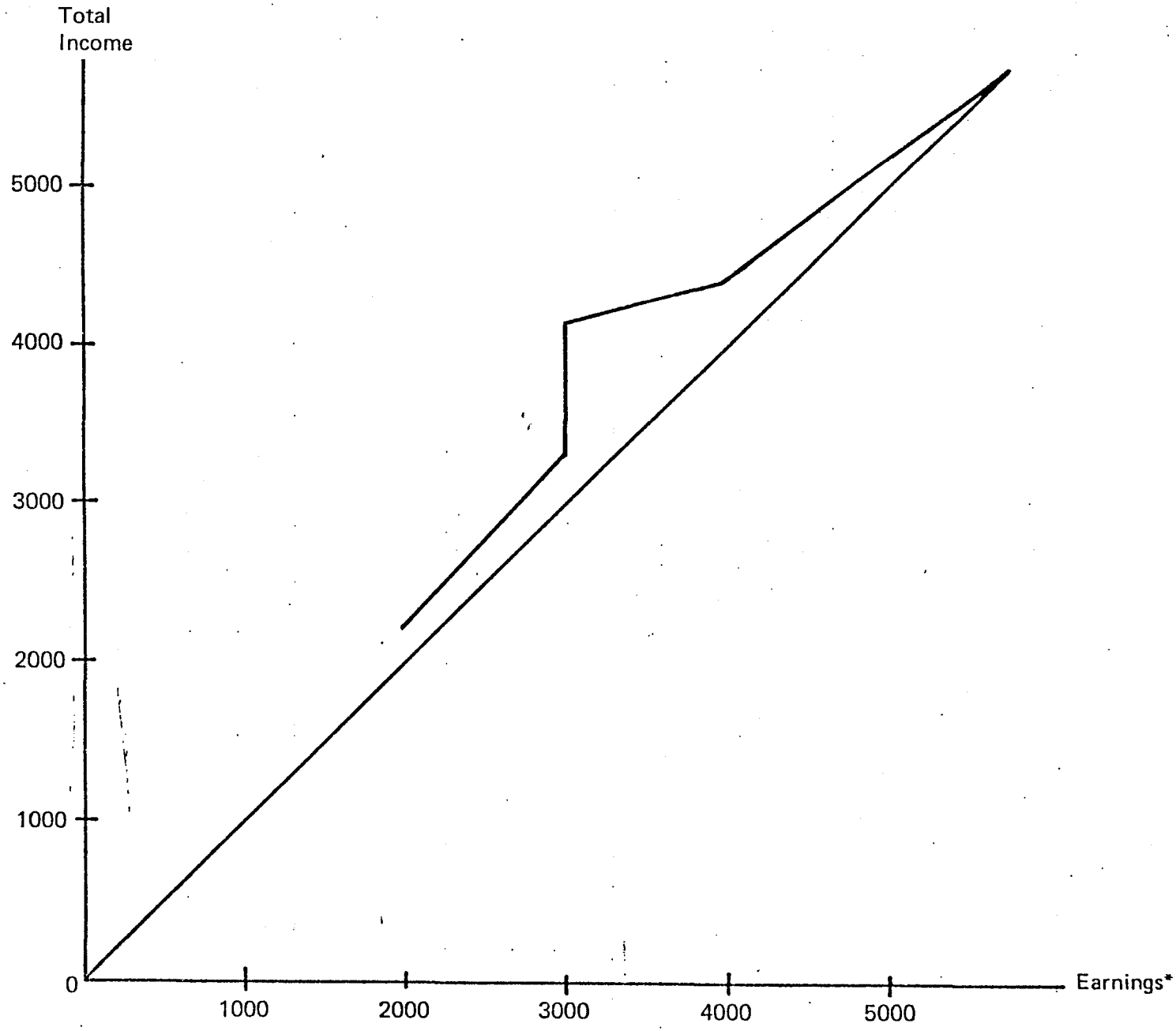

Figure A-1.

*Increased earnings from $3000-$4000 assumed to come from full-time work but at increasing wage *rates.*

is shown in Table 1. It should be noted that both the wage-rate subsidy and the earnings bonus would also be payable to low-income family heads who secured regular public or private employment on their own.

TABLE 1

Earnings, Subsidies, Bonuses, and Total Income for Participants in Employment Program Working Full-Time in Regular Employment

Wage Rate	Annual Earnings from Employer	Wage Rate Subsidy	Earnings Bonus	Total Income
$1.50	$3000	$750	$300	$4050
$1.75	$3500	$375	$350	$4225
$2.00	$4000	---	$400	$4400
$2.50	$5000	---	$150	$5150
$2.80	$5600	---	---	$5600

The third option available to the WA would be exercised if it failed to place the applicant in regular private- or public-sector employment. In this case, the applicant would be employed in one of the public service activities to be either arranged or operated by the WA. For such employment, the applicant would be paid three-fourths of the national minimum wage and would be guaranteed 32 hours of work per week. Presuming a $2.00 minimum wage and 32 hours of work per week, this would imply an annual income of $2400.[44] Neither the wage-rate subsidy nor the earnings bonus would be paid for such employment.

A special arrangement is provided for the low-income family head who is able to secure only part-time regular public or private employment. In such a situation, the employee would receive his wage rate from the regular private- or public-sector job, the wage-

[44] The limitation of work to 32 hours appears to be based on a desire to keep the guarantee at the $2400 level, hence making the public service alternative less desirable than full-time private employment. An alternative would be to guarantee full-time employment, which at $2.00 per hour implies an annual income of $3000. In the remainder of this paper, both alternatives are analyzed.

rate subsidy (if his wage rate was less than the minimum wage but more than three-fourths of it), and the earnings bonus on the sum of husband's and wife's earnings. In addition, the part-time worker would be eligible for additional employment from the WA to result in a combined total of 40 hours per week. The amount of income (and hence, employment) which the WA would provide the applicant through some regular part-time employment is shown in Table 2.[45]

Of concern is the matter of state income-supplementation programs and their relationship to the work-conditioned subsidies embodied in the Committee bill. To eliminate the chance that state supplementation would reduce the work incentives of the plan, the bill requires states which choose to supplement the incomes of participating families to assume that the annual earnings of the family are at least $2400--implying 32 hours of work at the guaranteed wage rate of $1.50. Moreover, states would be required to disregard annual earnings between $2400 and $4500 in computing state supplemental payments. This implies a constant additional cash benefit which is not eroded by incremental earnings until earnings equal more than $4500. As the Finance Committee report states:

> The effect of this requirement would be to give a participant in the work program a strong incentive to work full-time..., and it would not interfere with the strong incentives he would have to seek regular employment rather than working for the Government.

In addition to this basic structure of the cash transfer, work-conditioned subsidy, and public service employment programs, there are other important provisions. One such provision concerns the subsidization of child-care services for participants in the employment program. Perhaps more than other proposals for welfare reform, a work-conditioned income-support program has implications for the public-sector provision or subsidization of day-care services. Because the Committee bill would lead to essentially full-time employment for over 1 million mothers of school-age children who are currently receiving AFDC benefits, a major increment to the supply of after-school and full-time summer day-care services is required.

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[45] An interesting question affecting this package of employment options concerns the availability of public service employment to a family head currently holding full-time regular employment at, say, the minimum wage. With a minimum wage of $2.00, the annual earnings of the worker would be $4000 to which would be added the earnings bonus of $400. Could this person become eligible for additional public service employment through the WA? The Committee has answered this affirmatively, stating that the WA may provide the worker up to 20 additional hours of work per week if such employment is available.

TABLE 2[a]

Public Service Income and Employment Provided by Work Administration to Low-Income Family Head with Part-time Regular Employment

Number of Hours of Work and Wage Rate	Annual Income from Employer	Income from Wage-Rate Subsidy	Income from Earnings Bonus	Total Income from Part-time Employment	Additional Income and Hours Per Week Guaranteed by Work Administration[b]		Total Income
10 hours/week							
$1.20/hour	$600	--	$60	$660	$2250	(30)	$2810
$1.60/hour	$800	$150	$80	$1030	$2250	(30)	$3280
$2.00/hour	$1000	--	$100	$1100	$2250	(30)	$3350
$2.40/hour	$1200	--	$120	$1320	$2250	(30)	$3575
20 hours/week							
$1.20/hour	$1200	--	$120	$1320	$1500	(20)	$2820
$1.60/hour	$1600	$300	$160	$2060	$1500	(20)	$3560
$2.00/hour	$2000	--	$200	$2200	$1500	(20)	$3700
$2.40/hour	$2400	--	$240	$2640	$1500	(20)	$4140
30 hours/week							
$1.20/hour	$1800	--	$180	$1980	$750	(10)	$2730
$1.60/hour	$2400	$450	$240	$3090	$750	(10)	$3840
$2.00/hour	$3000	--	$300	$3300	$750	(10)	$4050
$2.40/hour	$3600	--	$360	$3960	$750	(10)	$4710

[a]Assumes employee is head of house and that there are no secondary workers in family.

[b]Number in parentheses behind dollar income entitlement is number of hours per week the WA would have to provide in public-service employment.

The Senate bill would establish within the WA a Bureau of Child Care which would have as its central function the provision of child-care services to single-parent family heads participating in the employment program. The Bureau would train persons to provide family day care, contract with existing day-care providers, give technical assistance to organizations wishing to establish facilities, and provide day-care services in its own, to-be-developed facilities, making maximum use of mothers who are participants in the employment program.[46] While mothers employed in special public-service jobs would apparently receive free day-care services--valued at $800 per child per year--the day-care benefit would be diminished for employable mothers who earn in excess of $2400. The Committee has not specified the rate at which this subsidy is to be reduced as earnings increase above $2400.

A second important provision enables participants in the employment program to volunteer for training programs to be administered by the WA. However, during the training, participants would be paid $1.30 per hour rather than the $1.50 in the special public service jobs. The cumulated difference between the two wage rates would be paid as a lump sum to those trainees who complete the program.

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[46]The Committee would authorize $800 million for the provision of such services.

APPENDIX B

Operation of a Carryover Accounting System Under an Earnings Supplement Policy

Under a carryover accounting system, earnings above the breakeven point in one quarter are credited to the next accounting period and, if not used to determine the supplement, remain as credits for four quarters. The supplement is determined on the basis of earnings and unused credits from the previous four quarters. This system is illustrated below for Earnings Supplement Plan B with a quarterly accounting period as shown in Table II-2. A family with earnings stream 1, for example, has earnings above the break-even point of $1250 in quarter 1. The earnings in excess of the breakeven, or $250, are carried over to quarter 2. In quarter 2 earnings are also above the breakeven point, and the excess plus the carryover to quarter 2 are carried over to quarter 3. In quarter 3, earnings are below the breakeven point, and the supplement is determined on the basis of the sum of earnings plus the carryover from the preceding quarters. This sum is greater than the breakeven point, so the family receives no benefit. The amount of the carryover used to arrive at this zero benefit, $450, is exhausted, so only $50 is carried over to quarter 4. In quarter 4, earnings are again below the break-even point, and the supplement is determined on the basis of earnings plus the $50 carryover The carryover accounting system results in a yearly benefit of $233, exactly the same benefit which would result from a yearly accounting period.

The carryover accounting system also results in a yearly benefit of $233 for a family with earnings stream 2. The interesting effect to note here is that the system provides earnings supplements in quarters when earnings are zero.

The system does not equalize yearly benefits under a quarterly and yearly accounting period for earnings stream 3. The important difference between earnings stream 3 and the others is not total yearly earnings, which are $1000 lower, but the fact that the sum of earnings plus the carryover from preceding quarters is less than the kink point in some quarters. When this sum is above the kink point, the tax rate on earnings is negative, and the carryover accounting system works the same as it does in a negative income tax type program with a negative tax rate. But when the tax rate (i.e. supplement rate) on earnings is positive, as it is below the kink point, the carryover accounting system produces benefits which are lower than those under a yearly accounting period.

Appendix Table B-1. Operation of a Carryover Accounting System Under Earnings Supplement Plan B

(Quarterly pivot point $500, Quarterly Breakeven $1250)

Earnings stream 1	Quarter	1	2	3	4	Yearly Sum
Earnings		1500	1500	800	500	4300
Carryover to next period		250	500	50	0	
Carryover used to determine supplement		0	0	450	50	
Supplement		0	0	0	233	233*

*[=1000-1/3(4300-2000)]

Earnings stream 2						
Earnings		2150	2150	0	0	4300
Carryover to next period		900	1800	550	0	
Carryover used to determine supplement		0	0	1250	550	
Supplement		0	0	0	233	233**

**[=1000-1/3(4300-2000)]

Earnings stream 3						
Earnings		1650	1650	0	0	3300
Carryover to next period		400	800	0	0	
Carryover used to determine supplement		0	0	800	0	
Supplement		0	0	150	0	150***

***[1000-1/3(3300-2000) = 567]

APPENDIX C

Data on the Target Population

In this section we present some crude data relating to potential recipients of an earnings supplement. Much more detailed analysis will need to be carried out to estimate the program's costs and its distributional impact.

We have used as a micro data base the cross-section sample of the U.S. population prepared by the RIM project at the Urban Institute, which is based on the Current Population Survey of March, 1969. The data have been adjusted to portray the income status of the population for 1973.

With reference to plans A and B outlined in section I, we have chosen families with earnings less than $5,000 to be the target population.[47] In order to focus on the group we take to be "the working poor," we have excluded families which are receiving public assistance payments, and those with heads who are aged, students, or inmates of institutions. Thus the data do not refer to the exact population which would be covered under the program. Included among the family units are "unrelated individuals."

In Table C-1 we show the distribution of earnings for family units with earnings less than $5,000, for three subgroups of family units: those with adult members only, those with one parent and children, and those with two parents and children.

Among the 10.5 million families in the target population, 7.1 million have adults only, 1.5 million have one parent, and 1.9 million have two parents present. Clearly, whether family units without children are to be made eligible for the earnings supplement will have a major impact on the program.

Among target population families with adults only, which include childless couples as well as unrelated individuals, about one-fourth have zero or negative earnings, and thus would receive no supplement. The incentive to obtain a job provided by the earnings supplement would affect these people. The rest are fairly uniformly distributed up to $5,000, indicating that there will be substantial proportions below as well as above the kinkpoint for the plans we have considered. However, for family size conditioned earnings supplement plans, it should be noted that the breakeven level for small families would be substantially below $5000. For example, in the family size conditioned

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[47] This choice is not a good approximation of the target population if the supplement is family-size conditioned. Table C-3 below provides some indication of the target population under such a program.

plans discussed in section I of the paper, the breakeven point for families of size 2 was $2900 and for families of size 1 about $2200.

Among the 1.5 million one-parent families, who are not already receiving public assistance, the distribution of income is practically the same as that for the adult-only families.

Among the 1.9 million two-parent families in the target population, the situation is strikingly different. About 10 percent have zero or negative incomes. Among the rest, the frequency density increases with the earnings level: there are relatively few families with low earnings, and relatively many families with high earnings. Thus, compared to other family types, two-parent families are likely to be above the kinkpoint.

If the widest eligibility definitions are adopted, thereby allowing all family types to receive the supplement, about one-fifth of families with less than $5,000 earnings will have no earnings, while the frequency distribution of the remainder will be slightly concentrated toward higher incomes. If families without children are excluded, the number of recipient units would decrease by 70 percent. Among the remaining eligible population, over 15 percent would receive zero supplements, while the frequency distribution of those receiving supplements will be concentrated toward higher incomes.

In Table C-2 we show the distribution of earnings among one- and among two-parent families, by the number of children. The table shows that there is not a particularly strong relation between family size and family earnings. Thus, under a family size conditioned earnings supplement such as variant 2 of section I, a fair number of large families with low earnings will receive the same supplement as smaller families. Only under variant 1 will the supplement be related to family size for all families.

In regarding the very large number of families with very low earnings which are indicated in Table C-1, the question arises whether they receive some significant amount of unearned income. It is possible that some of these families are not poor, and that when the supplement is adjusted for unearned income these families will be effectively excluded from the program. To get some idea of what effect this will have, we have removed all nonpoor families from Table C-1, and present remainder in Table C-3.

Excluding nonpoor families reduces the total number in the target population from 10.5 million to 4.3 million; the greatest proportional reduction occurs among the adult-only families. The exclusion of the nonpoor has not eliminated very many low and zero earners. More than half the adult and one-parent families have earnings under $1,000, and nearly a third with zero. Of course, one would not expect to find high incomes among "poor" families. These data, which exlude aged families and those receiving public assistance, highlight the severity of the poverty problem for many families.

Table C-3 also provides a very rough approximation of the income patterns of the target population of a family-size conditioned earnings supplement. Under such a program, the breakeven level of earnings would rise in step with the official poverty line for families of varying sizes. By excluding nonpoor families we have excluded most adult-only families with earnings greater than $2,000. Relatively fewer families with children who have high earnings are excluded. A family size conditioned earning supplement program would have its target population cut by more than a half if narrow eligibility criteria were adopted.

About one third of adult-only and one-parent families with earnings less than the breakeven level now have zero earnings, but these families would gain an incentive to work. The earnings of two-parent families are concentrated in the midrange, where supplements are the largest.

Table C-1. Percentage Distribution of Families with Earnings less than $5,000, by Earnings Class

	Neg	Zero	0-1000	1000-2000	2000-3000	3000-4000	4000-5000	Number of Families with E < $5,000
Adults Only	1.51	24.00	13.95	13.78	14.19	14.67	17.92	7,079,478
One Parent/ Children	(.73)	27.03	17.08	14.14	12.32	12.85	15.85	1,497,848
Two Parent/ Children	(4.00)	6.17	9.63	11.30	16.25	22.30	30.33	1,887,056
Total	1.85	21.22	13.62	13.38	14.29	15.78	19.86	10,464,382
Total; Excl. Adults only	2.55	15.40	12.94	12.56	14.51	18.11	23.92	3,384,904

Table C-2. Percentage of Families with Children with Earnings less than $5,000, by Earnings Class and Family Size

Family Type	Neg	Zero	0-1000	1000-2000	2000-3000	3000-4000	4000-5000	Number of Families with E < $5000
One Parent								
1 child	.73	24.91	17.41	14.34	11.07	13.32	18.22	578,009
2 children	1.18	26.47	13.37	16.75	11.39	14.08	16.75	453,197
3 children	.00	32.84	20.98	12.85	15.10	8.90	9.34	217,933
4 children	1.03	31.49	16.87	10.81	13.04	12.84	13.91	130,987
5 children	.00	22.08	21.30	7.97	17.47	8.06	23.11	49,715
6 or more children	.00	25.32	23.85	10.20	15.00	16.69	8.95	68,057
Two Parents								
1 child	2.93	7.35	7.66	10.34	16.61	23.04	32.07	724,923
2 children	6.04	5.29	10.55	10.05	15.83	20.59	31.63	482,946
3 children	4.82	7.46	8.51	15.54	15.45	21.76	26.47	304,722
4 children	3.05	3.33	9.13	11.65	16.90	22.98	32.97	172,750
5 children	1.36	5.27	8.18	13.11	15.61	29.48	27.00	93,518
6 or more children	3.61	3.78	24.03	9.59	17.42	19.08	22.48	108,197

Table C-3. Percentage Distribution of Poverty Families with Earnings Less than $5000, by Earnings Class

Family Type	Neg	Zero	0-1000	1000-2000	2000-3000	3000-4000	4000-5000	Number of Poor Families with E < $5,000
Adults Only	3.76	33.82	28.57	26.06	7.18	.50	.11	2,478,862
One Parent/ Children	1.10	32.70	23.36	18.21	13.74	7.13	3.76	725,124
Two Parent/ Children	6.49	4.93	13.60	16.06	21.67	22.42	14.85	1,082,741
Total	4.00	26.33	23.91	22.21	11.95	7.16	4.45	4,286,727
Total, Excl Adults only	4.33	16.07	17.71	16.92	18.48	16.29	10.50	1,807,865