# RESEARCH ON PAPERS

A BASE FOR THE NEGATIVE INCOME TAX

Charles W. Meyer



UNIVERSITY OF WISCONSIN ~ MADISON

### A BASE FOR THE NEGATIVE INCOME TAX

Charles W. Meyer

Charles W. Meyer is Professor of Economics at Iowa State University. The author was a member of the Institute's staff and a visiting professor at The University of Wisconsin from September, 1968 to June, 1969. Preparation of this paper was supported by The Ford Foundation and by funds granted to the Institute for Research on Poverty, University of Wisconsin, pursuant to provisions of The Economic Opportunity Act of 1964.

### ABSTRACT

The negative income tax is designed to provide income maintenance for needy families without interfering unduly with the incentive to work. A minimum living standard is made possible by payment of a basic allowance adjusted for differences in family composition. The size of the allowance is reduced as income rises up to a cutoff (zero allowance) level.

The rate at which the allowance is reduced must be substantially below 100 percent of the increment in other income if the recipient is not to be discouraged from contributing to his own support. A combination of a generous basic allowance and a reasonable marginal rate results in payments to families with incomes well above generally recognized poverty levels. For example, a \$3,500 basic allowance combined with a 50 percent rate calls for payment of an allowance up to a \$7,000 cutoff.

Payments to families with above poverty incomes can be reduced by adopting a broad definition of income. Elimination of most of the exclusions and personal deductions allowed under the personal income tax would reduce the cost of the NIT program and contribute to greater inter-family equity among recipients. Those exclusions and deductions that are allowed should be consistent with other goals of the NIT and anti-poverty programs in general. Since the policy goals for low-income households differ from those for the remainder of the population, a different base for negative and positive taxes is desirable.

Some NIT proposals call for a consideration of net worth as well as current money income in determining the level of transfer. Net worth may be accounted for by imputing income to various assets and adding it to money income. Some plans also call for adding a fraction of net worth to money and imputed income. The effect of various asset imputations on the number of families in the NIT range is examined. The results show that inclusion of imputed income on owner-occupied housing and of a fraction of net worth affect the largest number.

### A BASE FOR THE NEGATIVE INCOME TAX

### INTRODUCTION

The negative income tax is attracting increased attention as a means for supplementing the income of needy families. Most NIT proposals call for a national program that would reach all low-income families, including many not covered by the various categorical programs. A national NIT would be a step toward federalizing the welfare system with a consequent reduction in interstate differentials in benefits and a welcome relief for state and local treasuries.

Various specific plans have been suggested and analyzed.  $^1$  All contain the same basic components. These include the basic allowance, B, which varies with family size and represents the guaranteed minimum income to be paid to families with no other income; the marginal tax rate, t, at which the basic allowance is reduced as income from other sources,  $Y_a$ , rises; and breakeven income,  $Y_b$ , at which NIT payments cease.

Total payment, P, is determined by the formula

$$P = B - tY_a ,$$

and breakeven income is as follows:

$$Y_b = \frac{B}{t}$$
.

These relationships hold only under a proportional rate structure. Non-proportional rate structures have also been proposed.<sup>2</sup>

The NIT would presumably be administered in conjunction with the positive income tax, but not necessarily by the same agency. Administration and compliance would be facilitated if both taxes were based on the same definition of income, but other factors point to the choice of different bases. Policy goals that are desirable for low-income families differ from those suitable for more affluent taxpayers. Proponents of the NIT must also consider the political implications of tying a welfare proposal to general tax reform.

### POLICY GOALS OF NIT

The overriding goal of the NIT is to guarantee a minimal living standard for all eligible families. The extent to which this goal is attained is dependent mainly on the payment structure, i.e., the basic allowance and the rate at which it is reduced as other income increases.

Any attempt to attain a satisfactory living standard through a generous basic allowance runs counter to a second goal of the NIT, encouragement of self support. A high basic allowance combined with a high marginal rate could have serious disincentive effects, especially on labor supply. Disincentives are reduced by lowering the marginal rate, but this raises the breakeven level. For example, breakeven income for a \$3,500 basic allowance (roughly equivalent to the poverty level for a family of four) is \$7,000 under a proportional rate of 0.5 — a rate of 2 to 4 times that experienced by working-class families under

the positive tax. Dropping the rate to 0.33 raises the cutoff to \$10,500. Consequently, any program that combines a generous basic allowance with relatively low marginal rates is likely to provide substantial benefits for families with incomes well above generally accepted poverty levels. The case for limiting further leakages to non-poor families by broadening the definition of income thus extends beyond the usual argument for horizontal equity.<sup>4</sup>

Encouragement of self support involves more than short-term work incentives. Willingness to improve occupational skills, to change jobs and migrate, and to save or dissave are also important.

These are among the major goals that must be considered in selecting the definition of income on which NIT transfers are to be based.

### A BASE FOR THE NIT

Most proposed NIT plans contain specific suggestions for extending the income base well beyond that in effect under the personal income tax. By including in income all interest and dividend payments, realized capital gains, and imputed rent on owner-occupied dwellings, and by disallowing personal deduction (except for nondiscretionary outlays such as uninsured medical expenses and alimony), NIT payments to families with substantial incomes can be virtually ruled out. A more inclusive base would also discourage low-income families from taking steps to increase their NIT benefits by, for example, shifting their investments to tax-exempt bonds.

Inter-family equity among NIT recipients would be affected significantly by treatment of public and private transfers. Exclusion of social security and other retirement income would favor the elderly. Exclusion of unemployment compensation, sick pay, and strike benefits would favor persons not working and reinforce the work-disincentive effect of income maintenance. Hence a good case can be made for inclusion of such payments in income.

Payments received under categorical assistance programs such as old age assistance, aid to families with dependent children, and aid to the blind and totally disabled also reduce the need for NIT payments. These programs are funded jointly by federal, state, and local governments. Individual states are allowed great freedom in setting eligibility requirements and payment levels. If payments are included in the base of a federal NIT, state and local governments will in effect be subsidizing the federal program at high marginal rates, and they can be expected to respond by cutting welfare budgets. In fact much of the support for a federal program of income maintenance comes from state and local officials who see it as a source of relief for their fiscal difficulties.

An acceptable solution may require a major revision of existing welfare practices. Milton Friedman, an early proponent of NIT, regards it as a means of replacing all other welfare programs. A less radical proposal would call for a national program that would be generous enough to provide adequate resources to most low-income families.

Special transfers exempt from the NIT base could be allowed in cases of special need, e.g., where disability or extraordinary medical costs place added burdens on the family. States could be granted an option to supplement federal NIT programs, especially where cost of living may be above the national average. Such features would allow flexibility that cannot be built into the basic formula for a national program, but state and local options would have to be restricted to prevent distortions of the basic NIT rate structure (thus defeating the goal of reducing the disincentive to provide self support).

Transfers in kind to low-income families are becoming increasingly important. Subsidized public housing, rent supplements, free school lunches, and food stamps are examples. These programs may be criticized on grounds of horizontal inequity, because they are not available to all families in similar economic circumstances. Inter-family inequities could be reduced by adding the value of aid in kind to income and reducing NIT payments accordingly. Because the NIT rate is substantially below 100 percent, a family's allowance would be reduced by only a fraction of the value of the aid. Reduction of the allowance by the full value of a transfer in kind would — under usual assumptions about consumer preferences — discriminate against recipients of such assistance, since payment in kind is inferior to cash.

Transfers from private individuals and charities present a similar set of problems. They clearly reduce the need of recipients

for income maintenance, but their inclusion in the NIT base would discourage giving and would be difficult to enforce. In terms of principle, the solution revolves around the unsettled dispute of whether gifts should be regarded as income by the recipient or consumption by the giver. The income base can also be extended by eliminating those personal deductions that do not contribute to the goals of a NIT program. Deductions of nondiscretionary expenses, such as above-average uninsured medical expenses and alimony payments, are defensible on grounds of inter-personal equity. Deductions of costs of earning income not only improve measurement, but offset work disincentives as well. The provision in the personal income tax code that allows deduction of costs of maintaining or improving skills in one's current occupation could be relaxed to include costs of obtaining skills needed in a new occupation. Part of the cost of upgrading skills might legitimately be borne by the NIT program.

The case for allowing deduction of state and local taxes needs further study. If the burden of these taxes is relatively uniform among families throughout the nation, they can be reflected in the basic allowance. If they are not, as seems likely, the NIT could be used to offset unequal burdens imposed on the poor in different states. Under a national program the burdens of regressive sales and property taxes could be mitigated by allowing deduction. As in the case of the federal income tax, a full credit would have to be allowed for any state income tax paid if the marginal rate on income is to be held down to the NIT level.

The NIT program could also be used to counteract the regressivity and disincentive effects of the social security tax, either by allowing a deduction or a full credit. This would help to reverse one of the most objectionable characteristics of our present tax and welfare systems — discrimination against the low-income individual who tries to work for a living.<sup>8</sup>

# TREATMENT OF WEALTH

Current income, even when adequately measured, is not the only dimension of economic well-being. The ownership of assets is important, even among families with incomes below the poverty level. <sup>9</sup> I shall consider some of the ways in which a NIT can affect decisions to accumulate and decumulate wealth and then analyze some proposals to include asset holdings as well as income in the transfer formula.

# Incentives to Accumulate

Provisions for accelerated depreciation, investment credits, depletion allowances, and the like are incorporated into the personal income tax for the expressed purpose of encouraging certain types of capital accumulation. A similar statement might be made about the tax privileges accorded homeowners. Incentives to invest do not appear to be consistent with the NIT goal of maintaining minimal current levels of consumption. Tighter restrictions on depreciation accounting and other subsidies to investment appear to be desirable.

To counter this argument, it should be pointed out that investment can, in some cases, add to future earning capacity and thus contribute to the goal of encouraging self support. This goal may be attained more efficiently, however, through loans of the type made by the Small Business Administration, where each case can be decided on its merits.

### Incentives to Decumulate

NIT provisions can be written to encourage families to maintain consumption levels during periods of low income by dissaving. For some families the treatment of capital gains income is likely to be important. Even if the 50 percent exclusion allowed under the positive tax is adopted, families with incomes temporarily below the breakeven level may be reluctant to sell assets when they are subject to the relatively high NIT rates. Sale of assets could be encouraged by applying to capital gains the rate that the person would pay under the positive tax. For purposes of this calculation it seems reasonable to include the NIT transfer in the income base. Another alternative is to provide a small exemption for capital gains. The exemption might be equal to the difference between family income (excluding capital gains and the NIT payment) and a predetermined poverty level. The exemption would be washed out for families with incomes above the poverty line but below the NIT breakeven income.

# Imputations

Payments to low-income families with significant asset holdings can be reduced or eliminated by imputing income to assets and adding it to money income. Various imputation schemes have been suggested, ranging from a rent imputation on owner-occupied dwellings to a capital-consumption formula that would add to income a fraction of net worth.

The rationale for the housing imputation is thoroughly discussed in the literature on the income tax. <sup>10</sup> A more inclusive proposal calls for imputing income to a broad range of asset holdings. A rate representative of the return on conservative investments (perhaps 5 percent) is imputed on the estimated value of equity in selected assets. Money income from assets is deducted and the residual, if positive, is added to income. The purpose of the imputation is to place a floor under the return to assets so as to limit NIT payments to persons owning assets with low current yields such as owner-occupied dwellings, vacant lots, checking accounts, or growth stocks.

The use of a capital-consumption formula imposes a more extreme limitation on NIT transfers to persons with net worth. The model negative income tax statute prepared by a group of Yale law students 11 would add to income 30 percent of net worth after allowing small exemptions of personal property and property used in a trade or business. This type of imputation is especially severe on those who are self employed in occupations requiring a significant capital investment; farm operators being perhaps the most important such group. An alternative approach is suggested by Weisbrod and Hansen. 12 They added to money income the annuitized value of net worth to obtain a measure of economic well-being that combines income and assets. The use of an annuity formula would be of most significance for the elderly, since the annual annuity obtainable from a given sum rises as life expectancy declines.

# Evidence on Importance of Imputations

The inclusion in the transfer formula of imputed returns to assets would complicate administration of a NIT and increase the burden of compliance on potential beneficiaries. Therefore, it seems useful to examine data on asset holdings of families with incomes in the NIT range to see how many would be affected by various imputations.

Data from the Survey of Financial Characteristics of Consumers 13 were used for this purpose. The results presented below were derived from the Survey's data tape, which contains information on individual households relating to income, debt, assets, occupation and age of head, size of community, and composition of family. The system of weights employed in the Survey was used to convert the sample observations to national totals.

The importance of various imputations is demonstrated by showing how the number of families (including unrelated individuals) with 1962 incomes below the poverty level is affected by the use of different formulas. A similar count is made for incomes at twice the poverty level to see how the number of recipients of NIT payments would be affected by imputations under a NIT with the basic allowance set at the poverty level and a marginal rate of 0.5. The poverty levels used in obtaining the count are shown below. They are somewhat similar to the SSA index, <sup>14</sup> but with no downward adjustment for farm families.

Family Composition Adults Children		Poverty Income	Twice Poverty Income	
1	0	\$1500	\$3000	
1	1	<b>\$1950</b>	\$3900	
1	2	\$2350	\$4700	
1	3	\$2700	\$5400	
1	4	\$3025	\$6050	
1	5	\$3325	\$6650	
1	6 or more	\$3550	\$7100	
2	0	\$2150	\$4300	
2	1	\$2600	\$5200	
2	2	\$3000	\$6000	
2	3	\$3350	\$6700	
2	4	\$3675	\$7350	
2	5	\$3975	\$7950	
2	6 or more	\$4200	\$8400	

Table I shows how the number of families with below poverty incomes declines as the definition of income is extended to include various imputations. Results are shown for the entire population and for families classified by age of head and by urban or rural residence. The number of families with incomes less than twice the poverty level is only shown for the entire population.

The poverty count in Row 1 is based on broadly defined net money income. The total of 12.6 million families and individuals closely approximates Orshansky's estimate of 12.1 million for 1963. 15

TABLE I

FAMILIES WITH INCOME BELOW POVERTY LEVEL IN 1962 UNDER SELECTED IMPUTATION FORMULAS

(in millions, and as a % of people below poverty by money income alone)

	Total Families	By Age of Head		By Residence <sup>a</sup>		Total Families
Money Income and Various Imputations	Below Poverty	Under 65	65 or Over	Urban	Rura1	Beiow Twice Poverty
Row 1. No imputations (millions) (%%)	12.6 100	8.0 100	4.6 100	8.0 100	4.6 100	28.9 100
Row 2. Money income plus imputation for owner-occupied dwellings (millions)	11.4 90	7.3 91	4.2 91	7.1 89	4.3 94	27.9 97
Row 3. Money income plus imputation for real estate, automobiles and business assets (millions) ( % )		7.1 88	4.1 89	7.0 88	4.1 90	27.9 97
Row 4. Definition of Row 3 plus imputation for financial assets and checking accounts (millions) ( % )	10.7 85	6.9 86	3.9 84	6.7	4.0 87	27.6 96
Row 5. Money income plus imputation used in Row 4, plus capital consumption <sup>b</sup> (millions) (%)	8.2 65	5.7 71	2.5 54	5.5 69	<b>2.</b> 7 59	22.0 76

Data Source: Data Tape, Survey of Financial Characteristics of Consumers, Bd. of Gov. of the Federal Reserve System.

<sup>a</sup>Based on U.S. Census definition.

<sup>&</sup>lt;sup>b</sup>Capital consumption equals net imputed income on assets included in Row 4 plus 10% of net holding of these assets.

When an imputation of 5 percent of the owner's equity in owneroccupied dwellings — a proxy for net imputed rent — is added to
money income, the number of families in poverty drops by 1.2 million
(Row 2). The drop is greater by 5 percentage points in urban areas,
probably as a result of the higher value of urban housing. When the
imputation is extended to business assets, investment realty, and
automobiles (Row 3) an additional 0.2 million families are removed
from the poverty category. Money returns from these assets were subtracted from the imputation to avoid double counting. <sup>16</sup>

A further extension of the 5 percent imputation to financial assets, including stocks, bonds, savings and demand deposits, and trusts (again netting out money yields) reduced the poverty count by an additional 0.5 million families to a total of 10.7 million (Row 4).

Finally a capital-consumption imputation equal to 10 percent of each household's net holdings of assets was added to the preceding imputation. The use of this imputation must be justified on the grounds that families with assets are expected to contribute to their own support by dissaving. It removed an additional 2.5 million from the poverty category, leaving a total of 8.2 million families in poverty, or 35 percent less than the number based on money income alone (Row 5). As the percentages show, the capital-consumption imputation, unlike the others, has a noticeably greater impact on

households with elderly heads. It is also more significant in rural than in urban areas. In the absence of an exemption for property used in a trade or business, it might reduce future earning potential.

The results for twice the poverty line show relatively small declines except when the capital-consumption imputation is included. This indicates that families with money incomes approaching twice the poverty level earn higher money yields on their assets and consequently would receive smaller net imputations. Therefore, under a generous NIT program with a breakeven income well above the poverty line, it appears that adoption of the 5 percent constraint on return to assets would have only a small effect on the number of participants and would result in a greater reduction in payments to families with relatively low money income. Use of a sizeable capital-consumption imputation, however, might remove as many as one-fourth of the higher income families from the program.

On the basis of these results it appears to me that the only alternatives that justify the administrative and compliance costs of making imputations are the addition of imputed rent on owner-occupied dwellings or the most inclusive imputation combined with a capital-consumption charge. Use of the broad imputation alone appears to affect only about 5 percent of the households. Admittedly the effect may be greater as families respond to the existence of a NIT, but at present we have little information on the magnitude of such adjustments. 17

# Alternatives to Wealth Imputations

The simplest alternative is to ignore assets completely and base transfers on current money income. The pressure to dissave on low-income families with assets would be relaxed and all families with less than breakeven incomes would be eligible for assistance.

A second alternative is to ignore assets at the time income maintenance payments are made, but to count all payments as a claim against the estate of the family head or his surviving spouse at the time of death. Since one of the consequences of income maintenance without asset constraints is to make it easier to maintain the integrity of the estate, the claim system has some justification. Furthermore, this scheme would permit recipients with illiquid or indivisible assets to enjoy minimal living standards without forced liquidation. Obviously, restrictions on *inter vivos* transfers would be required so as to limit avoidance.

A third possibility is to limit eligibility for NIT payments to selected subgroups in the population. The problem is to select subgroups that are most likely to have a high asset-income ratio, but whose exclusion would not seriously interfere with attainment of other goals of the NIT. The most obvious group in this category is the elderly who are eligible for Social Security benefits. A separate program for the elderly under Social Security seems to be reasonable not only because of the general public acceptance of the program, but also because the major feature of the NIT — income maintenance without

strong disincentive effects — is of limited relevance for persons past retirement age. Moreover, the sizeable leakage of payments to families above the poverty level that accompanies a generous basic allowance makes NIT for the elderly an expensive means of income support.

Another group in the high-asset low-income category is the low-income farm operator. Exclusion of farmers from the NIT would not be desirable, however, in the absence of a major reorientation of the existing farm program.

### SUMMARY AND CONCLUSIONS

The negative income tax is proposed as a device for providing adequate income maintenance for low-income families without unduly discouraging recipients from working. If these goals are to be met, the payment structure must combine basic allowances high enough to assure all families of at least poverty-level incomes with a marginal rate of allowance reduction well below 100 percent. A program of this type will be expensive and will require payments to (and reduction or elimination of federal income taxes for) many families with incomes above the poverty level. Consequently, some NIT proposals call for recognition of assets, as well as current money income, in the transfer formula on the grounds that families with significant wealth holdings should provide at least partial self support when their current income falls. Moreover, the definition of current income on which payments are based can be made much more inclusive than that in effect under the positive tax.

Addition of imputed income from owner-occupied dwellings would reduce the number of eligible families while contributing to horizontal equity among recipients. Broader use of imputation formulas would add significantly to costs of administration and compliance, but, except for imputations for capital consumption, would have a limited effect on the number of eligible families.

Alternatives to imputing income to assets include assignment of NIT payments as claims against the recipient's estate and exclusion from the program of selected groups with relatively high wealth-income ratios, e.g., the elderly and farm operators. Exclusion of selected groups should not be encouraged unless adequate alternative programs are available to them. Otherwise, the NIT would discriminate among the poor in a manner typical of many existing anti-poverty programs, including most of those associated with the so-called War on Poverty.

### FOOTNOTES

<sup>1</sup>See especially Milton Friedman, Capitalism and Freedom (Chicago: University of Chicago Press, 1962), pp. 190-195; Christopher Green, Negative Taxes and the Poverty Problem (Washington: The Brookings Institution, 1967); James Tobin, Joseph A. Pechman, and Peter M. Mieszkowski, "Is a Negative Income Tax Practical?" Yale Law Journal, 77 (Dec. 1967); Martin David and Jane Leuthold, "Formulas for Income Maintenance: Their Distributional Impact," National Tax Journal, 21 (Mar. 1968), pp. 70-93.

<sup>2</sup>David and Leuthold, op. cit., pp. 80-83; Peter A. Diamond, "Negative Taxes and the Poverty Problem - A Review Article," National Tax Journal, 21 (Sept. 1968), pp. 296-297.

<sup>3</sup>This article considers only the problem of integrating the bases. For a discussion of the problem of integrating positive and negative rate structures see Tobin, Pechman, and Mieszkowski, *loc. cit*.

The amount of money available for income maintenance is not necessarily independent of the definition of income. A narrow definition that allows payments to some families with high incomes could discredit what is allegedly a welfare program; but it could also gain the support of non-needy persons who qualify for transfers.

<sup>5</sup>Some critics would no doubt argue for exclusion of the portion of public and private transfers that represent a return of capital (that is, the funds paid into such programs by recipient). This is a part of the broader question of how to treat net worth in an income maintenance program. The question is considered below.

<sup>6</sup>Friedman, op. cit., pp. 192-194.

<sup>7</sup>For a summary of the debate over treatment of gifts and inheritances under the personal income tax see Richard Goode, *The Individual Income Tax* (Washington: The Brookings Institution, 1964) pp. 100-102. Goode's discussion is relevant to the NIT as well.

<sup>8</sup>Professor Robert J. Lampman suggests a special exemption of, e.g., the first \$600 of wage income earned by a family. Such an exemption would provide a liberal allowance for costs of earning income and would be easier to administer than deduction of specific expense items. In addition it would concentrate more of the benefits of income maintenance on the working poor. See Robert J. Lampman and Christopher Green, "Schemes for Transferring Income to the Poor," *Industrial Relations*, 6 (Feb. 1967), p. 124.

- For an attempt to construct a measure of economic welfare that reflects both income and assets see Burton A. Weisbrod and W. Lee Hansen, "An Income-Net Worth Approach to Measuring Economic Welfare," American Economic Review, 58 (Dec. 1968), pp. 1315-1329.
  - $^{10}$ For a summary see Goode, op. cit., pp. 120-129.
- 11"A Model Negative Income Tax Statute," Yale Law Journal, 78 (Dec. 1968), pp. 323-326.
  - 12 Weisbrod and Hansen, loc. cit.
- 13 Dorothy S. Projector and Gertrude S. Weiss, Survey of Financial Characteristics of Consumers (Washington: Bd. of Gov. of Fed. Reserve System, 1966).
- 14 Mollie Orshansky, "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, Jan. 1965, p. 8.
  - 15 *Ibid*, p. 12.
- 16A special problem arises in determining net money return to business assets owned by active proprietors, since a part of their income can be attributed to labor. In this study \$3,200 was allocated to labor (the income earned at the federal minimum wage for 50 weeks of 40 hours). The residual was assigned to capital and deducted from the gross imputation to get the net imputed income.
- 17 The NIT experiment now underway in New Jersey will presumably generate data on work effort, but its short duration of 3 years precludes collection of reliable data on longer term adjustments such as asset holdings or choice of occupation.