

**Milton Friedman, the Negative Income Tax,
and the Evolution of U.S. Welfare Policy**

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February 2003

The author is also associated with the National Bureau of Economic Research, the Institute for Research on Poverty, and the Joint Center on Poverty Research. This paper was delivered at the Conference to Honor Milton Friedman, University of Chicago, November 8, 2002. Comments from Milton Friedman and others at that conference, as well as comments on a preliminary version by seminar participants at the London School of Economics, are appreciated.

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Abstract

The negative income tax represents one of the fundamental ideas of modern welfare policy. Based on a simple application of elementary price theory, it has a powerful lesson for work incentives in welfare programs. The academic literature on the negative income tax has raised two difficulties with it, one concerning work disincentives arising from an increase in the eligibility point, and the other concerning the possible superiority of work requirements. Actual welfare policy developments in the United States over the last 30 years have exhibited strong trends both consistent and inconsistent with the negative income tax ideal. On the one hand, the Earned Income Tax Credit has produced a negative income tax-like program that exceeds in generosity anything that Friedman ever imagined; on the other hand, the rise of a work requirement philosophy and the increasing categorization of the population into different, multiple programs represent the antithesis of the negative income tax.

Milton Friedman, the Negative Income Tax, and the Evolution of U.S. Welfare Policy

The negative income tax (NIT) is one of the fundamental ideas of modern analysis of means-tested transfer (“welfare”) programs. Proposed in 1962 by Milton Friedman, the NIT has had a pervasive effect both on academic research on welfare and on U.S. welfare policy. The academic literature on the NIT began in the 1960s and continued strongly into the 1970s, and is extensive. In addition, the NIT has entered undergraduate principles textbooks as one of the best examples of how to use simple price theory to analyze important public policy issues. The NIT inspired multimillion-dollar randomized trials in the United States in the 1960s and 1970s to measure its labor supply effects, and a version of an NIT was proposed by President Nixon and considered by other presidents thereafter. The idea of using financial incentives to encourage welfare recipients to work has recently undergone another resurgence in policy circles, as virtually all U.S. states have lowered their welfare tax rates subsequent to being allowed to do so by 1996 federal legislation.¹

In this essay, I will review Friedman’s proposal for a negative income tax and outline what he saw to be its chief advantages. I will then consider two challenges to the central ideas of the NIT which appear in the academic literature, one having to do with labor supply effects of an NIT that run counter to its intended work incentives, and one having to do with using work requirements to induce increased labor supply instead. Finally, I will review the history of U.S. welfare policy over the last 30 years and will assess whether policy developments have been consistent or inconsistent with the NIT. I will show that there are strong trends in both directions.

¹The NIT was also championed by Lampman (1968), Tobin (1965), Tobin et al. (1967), and many others.

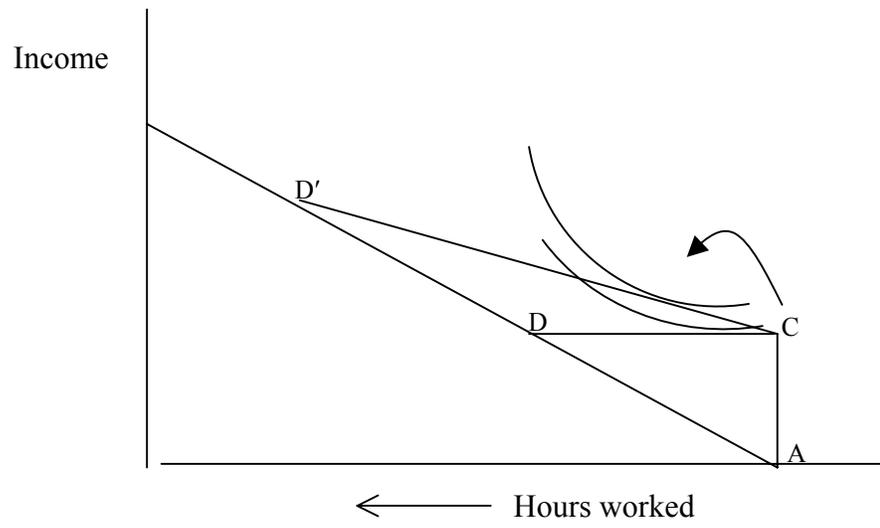
THE NIT AS SEEN BY FRIEDMAN

The main statements by Friedman on the NIT appear in *Capitalism and Freedom* (CF), written with the assistance of Rose Friedman; Friedman's 1969 congressional testimony (CT) in which he fleshed out his views on the program; and his discussion of welfare policy with Rose Friedman in *Free to Choose* (FTC) (Friedman, 1962, 1969; Friedman and Friedman, 1980).

Friedman originally proposed the NIT in CF in a remarkably brief chapter on the welfare system. By means of a simple numerical example, he illustrated how the benefit formula would work and why it would provide incentives to work by permitting welfare recipients to experience an increase in take-home income if they worked more. The standard diagram illustrating these effects is shown in Figure 1, an income-leisure diagram, where line ADD' illustrates how income rises with increased hours of work (at the rate determined by the hourly wage rate), CD denotes the constraint created by a welfare program with a 100 percent tax rate, and CD' denotes the constraint created by an NIT with a lower tax rate. The general formula for benefits is $B=G-tY$, where G is the guarantee, t is the tax rate, and Y is recipient nontransfer income. Increased labor supply will occur as some of those who maximized utility at C will maximize it at some positive hours point, as indicated in the diagram.

But work incentives were not the only advantages Friedman saw to the NIT in the CF discussion. He also noted that (1) the NIT has the advantage of providing support to poor families solely on the basis of their income, and not on the basis of some other characteristic purported to correspond to need (old age, farming, etc); (2) it provides cash, which is the best form of support from the point of view of the recipient; (3) it could be substituted for the then-existing, multiple "rag bag" of programs; and (4) it could cost less than the existing system by saving administrative costs and by concentrating benefits more easily on the poor. All four of these advantages have figured in subsequent U.S. policy debates and hence

FIGURE 1
Negative Income Tax



will be discussed further below when that policy is reviewed, as well as the central work incentive argument.²

In CT, Friedman addressed what he saw to be defects in a negative income tax plan proposed by President Nixon called the Family Assistance Plan. His main objection was that the NIT would be layered on top of other programs then in existence, instead of replacing all those programs. Layering an NIT on top of the other programs would result in cumulative marginal tax rates that could be very high if a family received benefits from multiple programs. In addition, the administrative simplicity of the NIT would be lost. Friedman also reiterated some of the advantages of an NIT in general—equal treatment of equals, benefits based solely on the objective criterion of income, and the separation of financial assistance from other social services.³

In FTC, the Friedmans provided their most detailed critique of the existing welfare systems in the United States, Britain, and other countries, as well as a more detailed discussion of the NIT. Their critique of the existing system takes it to task for providing no work incentives, creating a large bureaucracy for administration, creating a multiplicity of overlapping programs, and ultimately often benefiting the middle class.⁴ The NIT, in contrast, would provide work incentives, would involve minimal bureaucracy, would replace all existing programs, and would be targeted on the poor and not the

²Friedman also proposed folding the NIT into the tax system, integrating its rate with the positive income tax rate, and administering the NIT through the Internal Revenue Service. This issue will not be discussed here, as such an integration, at least for the main cash and in-kind welfare programs in the United States, has not been seriously considered. However, it was an important piece of Friedman's argument for the superiority of an NIT, because he argued that there should be no "poor" programs per se, but only a single transfer program that applied to the entire population. This would reduce invidious distinctions between the poor and nonpoor or, in modern parlance, reduce stigma. I should also note that Friedman saw as an additional advantage that the NIT does not distort market prices that minimum wages, tariffs, and farm supports do, which are often also argued on the basis of distributional considerations.

³In addition, Friedman noted that the Family Assistance Plan legislation proposed that job training and other services be provided only to those on welfare, and that this would draw individuals onto welfare. This issue has surfaced repeatedly in the 1980s and 1990s (Moffitt, 1992, 2003b).

⁴They also noted the incentives for interstate migration in the existing system, but did not address this issue further. This argument is usually made in support of a system with federally set, nationwide benefit levels rather than allowing states to set their own.

middle class. FTC does allow that some families might have special needs that would not be met by the cash program, but argues that those families could be supported by private charity. In an important new discussion, FTC discusses a trade-off between basic support levels (the guarantee), the tax rate, and program cost, noting that high support levels and low tax rates would likely have unacceptably high cost.⁵ FTC proposes to solve this problem by setting the NIT support level lower than that in the existing system—that is, lowering G at the same time as lowering t —on the argument that the existing system, with its multiple programs, provides too much support income. FTC notes the political problem created by this proposal because it would make some families worse off.

ISSUES RAISED IN THE ACADEMIC LITERATURE

Two issues have been raised in the academic literature which challenge central tenets of the NIT.

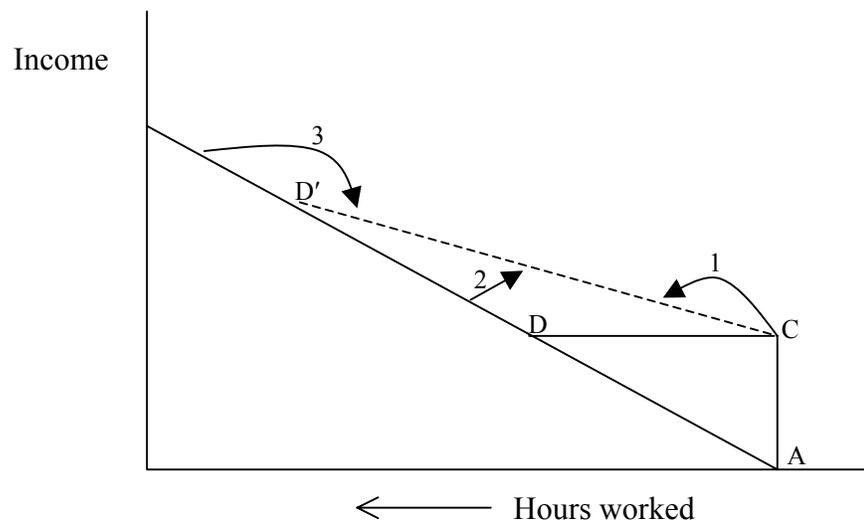
Ambiguity of Labor Supply Effects

The first concerns whether labor supply would be increased or decreased by a reduction in the welfare tax rate. The problem is illustrated in Figure 2, where the arrows show possible labor supply responses. Although some individuals will increase labor supply, as denoted by arrow 1, those denoted by arrows 2 and 3 will reduce their labor supply. The reduction in the tax rate raises the income eligibility point and makes it possible to combine work and welfare at higher levels of hours of work. This tends to draw onto welfare families that had not been on the rolls previously, reducing their labor supply. The change in average labor supply of the population is therefore ambiguous in sign.⁶

⁵The issue of the trade-off between work incentives and cost arose in the discussions in the 1960s and 1970s as well (e.g., Aaron, 1973).

⁶Note that the ambiguity has nothing to do with the opposition of income and substitution effects. The ambiguity discussed here would remain even if substitution effects always dominated income effects in labor supply functions.

FIGURE 2
Effect of a Negative Income Tax on Labor Supply



The problem of increasing eligibility created by the NIT was noted by Friedman and others in NIT discussions in the 1960s and 1970s. However, the problem was seen only as a matter of cost, and the trade-off was posed as whether the increased work incentives were worth the extra cost. However, Figure 2 illustrates that it might be that both cost would increase and labor supply would fall as a result of the NIT.

Some empirical evidence on the issue is provided in Tables 1 and 2. Table 1 presents simulations of the effects of NIT programs of different G and t levels on weekly hours of work, based on the population of single mothers (the main eligibility group for welfare) in 1976. A range of estimated elasticities taken from the labor supply literature was applied to a representative sample of the population. Each cell in the table shows the labor supply reduction resulting from an NIT of a particular G and t relative to no welfare program at all; all entries are negative, reflecting the fact that the NIT, like all means-tested transfer programs, reduces labor supply. Comparing the figures in different columns and therefore different tax rates, the table shows that hours of work rise from tax rate reductions in some cases but not others. Labor supply rises uniformly if elasticities are low, but labor supply falls if elasticities are high and tax rates are reduced from 100 percent to 75 percent, for example. Labor supply generally increases as the tax rate is reduced further, but the magnitude is sometimes quite small (for example, labor supply essentially does not change at all at low guarantees for the high elasticity case).

Table 2 shows evidence from one of the NIT experiments of the 1970s. Each cell shows an experimental-control difference measuring the labor supply reduction for a NIT of a particular G and t relative to the existing welfare program.⁷ Only two tax rates were tested, .50 and .70. For husbands and wives, tax rate reductions virtually always reduce labor supply. For single mothers, labor supply is sometimes increased and sometimes decreased, depending on the guarantee level.

⁷For husbands and wives, the existing welfare program provides essentially no benefits, so the figures represent the effect of the NIT relative to nothing at all. For single mothers, however, the figures represent the effect relative to the then-current AFDC programs in Seattle and Denver, which was received by the control group.

TABLE 1
Effect of NIT Plans with Different Levels of G and t
on Weekly Hours of Work of Single Mothers

	Welfare Tax Rate			
	1.00	0.75	0.50	0.25
Low Elasticities				
G = .50	-0.81	-0.49	-0.35	-0.33
G = .75	-2.18	-1.08	-0.68	-0.55
G = 1.00	-4.02	-1.74	-1.00	-0.64
High Elasticities				
G = .50	-2.06	-2.22	-2.02	-2.26
G = .75	-4.62	-4.99	-4.29	-3.87
G = 1.00	-7.34	-7.92	-6.50	-5.31

Source: Moffitt (1992, Table 5)

Note: G = Guarantee as a percentage of the official government poverty line.

TABLE 2
Effect of Seattle-Denver Experimental NIT Plans
on Annual Hours of Work

	Welfare Tax Rate	
	.70	.50
Husbands		
G = \$3,800	-94	-114
G = \$4,800	-29	-165
G = \$5,600	-211	-233
Wives		
G = \$3,800	-62	-134
G = \$4,800	-155	-227
G = \$5,600	-230	-228
Single Mothers		
G = \$3,800	-187	-67
G = \$4,800	-135	-177
G = \$5,600	-306	-74

Source: SRI International (1983, Table 3.9).

Notes: Figures represent experimental-control differences. G is in 1970 dollars for a family of four.

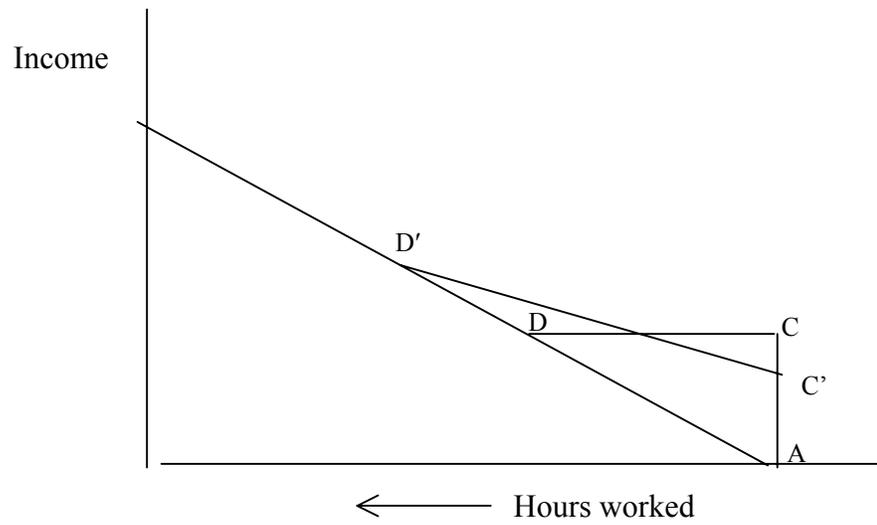
The conclusion to be drawn from these tables is that the effects of the NIT on average labor supply are variable and unstable. The policy lesson is that an NIT may increase labor supply for some groups and not others; at some levels of G and t and not others; for some income distributions and not others, depending on the relative numbers of families at different points along the budget constraint; for some countries and not others; and at some points in time in a single country and not others, if the underlying population is changing in its income and other distributions. An NIT implemented by a government on one day that increases labor supply may change to one that decreases labor supply the following day. This clearly creates difficulties in making the case for an NIT.

One important point to note is that an expenditure-constant implementation of an NIT would require reducing G at the same time as t , as noted by Friedman. This is illustrated in Figure 3, where $C'D'$ is the negative income tax constraint. Relative to the NIT in Figure 2, the reduction in G in Figure 3 unambiguously increases labor supply, and hence a reform of this type would have a greater chance of increasing work relative to the 100 percent tax rate program. However, the ambiguity in sign would still remain because the eligibility point is increased and there would still be some labor supply reductions in upper regions of the constraint.

This drawback to the NIT is shared by other reforms. For example, so-called “notches” in welfare programs, where benefits are suddenly reduced to zero for an extra hour of work and consequently create tax rates in excess of 100 percent, do not necessarily reduce labor supply relative to a program which smooths over the notch and permits a gradually declining benefit.⁸ Various other schemes, such as allowing nonlinear tax rates which initially are low at low hours of work and then increase as hours of work increase, likewise create an ambiguity. Earnings subsidies, to be discussed below, share this ambiguity. The fundamental reason for ambiguous labor supply effects of all reforms involving manipulation of the budget constraint—there are no exceptions—is that an expenditure-

⁸See Moffitt (2002) for a graphical illustration.

FIGURE 3
Expenditure-Constant Negative Income Tax



constant reform which lowers marginal tax rates in one region of the constraint necessarily must raise them in some other part of the constraint.

An NIT might be preferred by society even though its average labor supply effects are zero or negative if different social weights are attached to the labor supply of the very poor and of the near-poor (i.e., those slightly higher up the income distribution). The reductions in labor supply of the latter group would just be seen as another cost of increasing labor supply of the very poor, to be added to its other costs, and the choice of the tax rate would involve a trade-off between benefits and costs of a conventional type. Alternatively, there may be social value of redistributing income to those who are working but still poor, for example, even if their labor supply is decreased. The implication is that the desirability of any welfare reform, even one which holds expenditure constant, cannot be analyzed in terms of its labor supply effects alone, which are necessarily ambiguous.

The choice of G and t by society therefore requires the solution to an optimal tax problem using a particular social welfare function. This is indeed the solution proposed by Mirrlees (1971) in his model of optimal nonlinear income taxation (see also Fair, 1971), in which a lump sum tax, possibly negative (G), is combined with a marginal tax rate (t) to maximize a social welfare function in which social welfare weights presumably are inversely related to income. With a utilitarian objective function, for example, the value of redistribution to the poor arises from their higher marginal utility of income and the cost arises from work disincentives and consequent reductions in output. The labor supply disincentives of near-poor families from reductions in t which have been discussed in this section are implicitly accounted for in this exercise, yet clearly an NIT can still be optimal.⁹

⁹The Mirrlees-Fair model is quite special in many of its assumptions. For an example that focuses more on the issues discussed here, see Fortin et al. (1993), who maximized over G and t on a data set of Canadian families using social welfare functions based on Atkinson-style inequality indices. The study found that social welfare was generally maximized at relatively low values of t and G , and in a range where reductions in t increase labor supply even though other ranges had the opposite relationship.

Work Requirements and Categorical Transfer Systems

A work requirement system is one that divides the population into those who “can” work (“employables”) and those who “cannot” work (“nonemployables”). The former are denied any payment if they do not work and are provided with supplemental benefits only if they work some minimum number of hours. Thus the constraint in Figure 1 to the right of some minimum hours point is eliminated. Nonemployables are given G and, possibly, a low t on the presumption that they might be able to work some small amount.

Although work requirements were not addressed directly by Friedman in any of his writings, they are fundamentally at odds with the idea of a negative income tax. In an NIT, a certain degree of work disincentives is accepted by the provision of a support amount to those who do not work, but those work disincentives are intended to be reduced by voluntary inducements from the less-than-100-percent tax rate. Nonworkers are not queried about the reason for their lack of work, and recipients are judged only by their income, not any other characteristic (as noted earlier, Friedman opposed basing benefits on any characteristic other than income). Work requirements are also at odds with the idea of minimal government so heavily emphasized by Friedman, for they require an increase in the welfare bureaucracy to administer them, rather than a reduction as in an NIT.

Other economists have criticized work requirements on other grounds. One argument is that the government cannot adequately distinguish between those who can and cannot work, and that, in any case, there is a continuum of abilities which has no clean dividing point. In a related fashion, economists believe that anyone can work at an appropriate wage. Another argument is that work requirements invariably introduce discretion into the system, as different bureaucrats make different judgments about who is able to work and who is not. One should imagine that Friedman would prefer rules over discretion here as elsewhere. A third argument is that any system that puts individuals into boxes and provides them

with differential benefits simultaneously creates an incentive for those individuals to attempt to change their characteristics so as to change the box into which they are thrown.¹⁰

The academic literature has nevertheless provided several models in which work requirements can be seen to be advantageous, even optimal. Akerlof (1978) noted that if some of the unemployables can be “tagged”—that is, identified by some measurable, observable characteristic—then a move from an NIT to such a tagging system could provide higher benefits to the tagged individuals without changing total expenditure. Although Akerlof had family structure in mind as a characteristic—namely, whether a family had a single parent or two parents—the same argument applies for work-related characteristics like health, age of children, and others that are commonly associated with ability to work. The key parameter in the Akerlof model is the fraction of the truly needy who can be identified as such—in other words, the accuracy of the screening mechanism—and if this parameter is sufficiently large, then the social welfare gains from giving higher benefits to the tagged needy can outweigh the losses arising from the denial of benefits to the untagged needy. Akerlof addressed the problem of incentives to change categories as well, noting that there is a cost and benefit to changing categories and that even if this is added to the optimization problem, a tagging system could still be optimal if that cost is not as large as the benefits of tagging.¹¹

Besley and Coate (1992, 1995), under a different social welfare criterion (namely, raising incomes to some minimal level), showed that workfare could be used alternatively as a screening device to deter entry onto welfare by the more able. In their most comprehensive model, a workfare program is provided to those at the bottom of the income distribution, with a 100 percent tax rate, followed by an

¹⁰These arguments can be found in Barth and Greenberg (1971), Browning (1975), and Lurie (1975).

¹¹Parsons (1996) showed that if there is “two-sided” error—that is, some of the tagged individuals were indeed truly employable, as well as some of the untagged individuals being truly unemployable—then, provided the error rate does not exceed certain levels, the optimal program would provide benefits to both groups, although greater benefits to the tagged group. A lower marginal tax rate would be provided to the tagged group as well. A separate NIT would be given to each of the two groups.

NIT-like program for those higher in the income distribution, with a less-than-100-percent tax rate. In earlier work, Nichols and Zeckhauser (1982) made a similar point by arguing that the imposition of “ordeals” on welfare recipients, of which workfare was one example but onerous application procedures and participation requirements are others, could serve to deter entry. While the truly needy would be made initially worse off by these mechanisms, the gains in higher transfers—because there would cost savings arising from lower entry rates by the more able—could outweigh those losses.

What these models have in common is that there is some unobservable ability upon which the government would prefer to base transfers in a first-best world but cannot, so a second-best solution must be settled for. An NIT could end up as third-best relative to a second-best work requirement program.

The empirical implications of the models in the workfare literature have not been examined in any detail. Exactly how much error is made in categorizing individuals, for example, has not been determined in any actual applications. In the Akerlof model, some truly needy families are not “tagged” and hence are made worse off by a categorical system; a key parameter in his model denotes the fraction of the truly needy who are actually identifiable as such, and it clearly is critical whether that parameter is closer to zero than to one. The empirical importance of the compatibility constraints are also important, for the numbers of families who would change categories is a major additional factor. The Besley-Coate model also has the danger that making the program so ungenerous as to deter entry might simultaneously penalize the truly needy who are intended to be its chief beneficiaries.¹² Nevertheless, the models establish a prima facie case for the existence of workfare and categorical transfer systems that can dominate the NIT in social welfare terms.

¹²The Besley-Coate model instead assumes that all truly needy individuals can work and would use the benefit to supplement their earnings and hence would be no worse off. They note the importance of this assumption and the possibility of the issue noted here.

POLICY DEVELOPMENTS IN THE UNITED STATES

Policy development in the area of welfare systems in the United States has taken several directions over the last 30 years. Some of these are consistent with Friedman's idea of an NIT and some are inconsistent with it. Three developments are most germane: trends in (1) the level of welfare tax rates, (2) work requirements, and (3) multiple programs.

Welfare Tax Rates

On the narrow issue of whether welfare tax rates have been kept low, the policy record is rather mixed. The tax rate in the main cash transfer program, Aid to Families with Dependent Children (AFDC), was 100 percent from the inception of the program in 1935 through 1967, when it was lowered to 67 percent. This is by itself not a low tax rate, particularly when the tax rates of other programs are added on top of it. The tax rate was increased back to 100 percent in 1981, on the argument of the Reagan administration that concentrating benefits on the worst-off families was more cost effective and also that lower tax rates bring more families onto the rolls and reduce their work effort—precisely the theoretical point discussed above.

However, federal legislation in 1996 freeing up states to set welfare tax rates as they desire has resulted in major tax reductions. Since 1996, the majority of states have lowered their tax rates significantly, with 50 percent being the most common tax rate and with a scattering of rates in the 50–75 percent range (Gallagher, 1998, Table VI.2). A few states still have rates at 100 percent and a few have rates below 50 percent, even as low as zero (in which case eligibility is terminated at a notch, when income reaches a specified maximum). Work levels among welfare recipients in the post-1996 period

have risen dramatically, for more than 30 percent of recipients now work compared with 5 percent or less in the prereform period.¹³

Nevertheless, the most important policy development germane to welfare tax rates has taken place outside the traditional cash welfare system, and is represented by the rise of an earnings subsidy called the Earned Income Tax Credit (EITC). An earnings subsidy creates the budget constraint ABD shown in Figure 4, providing a subsidy to earnings up to some maximum point, after which it is phased out.¹⁴ It should be expected to increase labor supply for those in the subsidy region (assuming substitution effects dominate income effects) and to decrease labor supply for those in the phaseout region (see the arrows in the figure). Thus, once again, the effect on average labor supply is ambiguous although work effort at the lower end is likely to be increased.

However, earnings subsidies by themselves are irrelevant to the problem that the NIT is aimed to address, which is how much support to provide to those who have no other income. The pertinent diagram is therefore Figure 5, which shows the constraint created by a welfare program with a less-than-100-percent tax rate combined with the earnings subsidy.¹⁵ The envelope constraint is ACEFG. It is clear that, except for the segment EF where the marginal tax rate is negative rather than positive, the envelope constraint is very similar to an NIT. It is not far different than an NIT with a tax rate that passes through the envelope constraint, as illustrated by the dotted line in Figure 6. The only difference is that the marginal tax rates fluctuate over the constraint instead of being constant.

¹³Whether this change is solely the result of the reduced tax rates is an important question, because work requirements have also been introduced (see below) and the economy has improved over the period.

¹⁴The EITC has a flat region where the marginal tax rate is 0 instead of a single kink, but this is ignored for simplicity of exposition.

¹⁵The diagram assumes that the individual must choose one or the other in the overlap region, or, equivalently, that the earnings subsidy is taxed at a 100 percent rate by the welfare program. In the United States, the earnings subsidy is in fact not taxed at all and simultaneous receipt is allowed, so the budget constraint actually lies above that in the figure in this range.

FIGURE 4
Earnings Subsidy

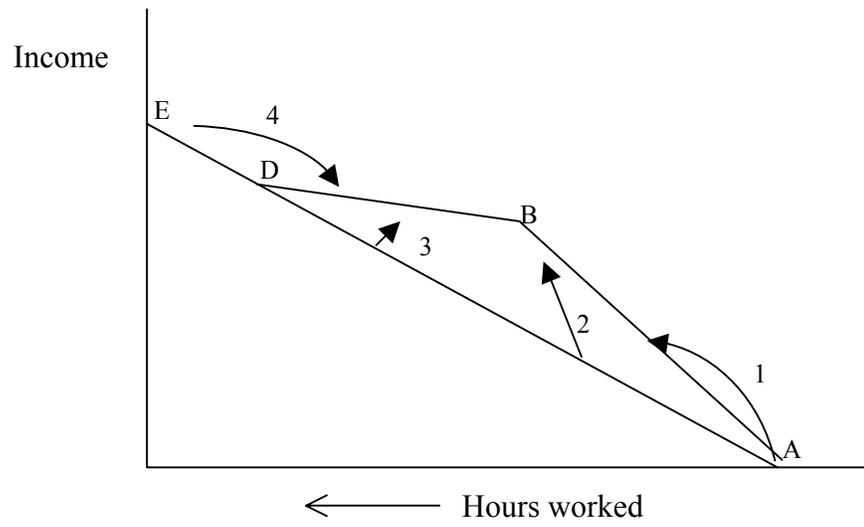


FIGURE 5
Earnings Subsidy Plus NIT

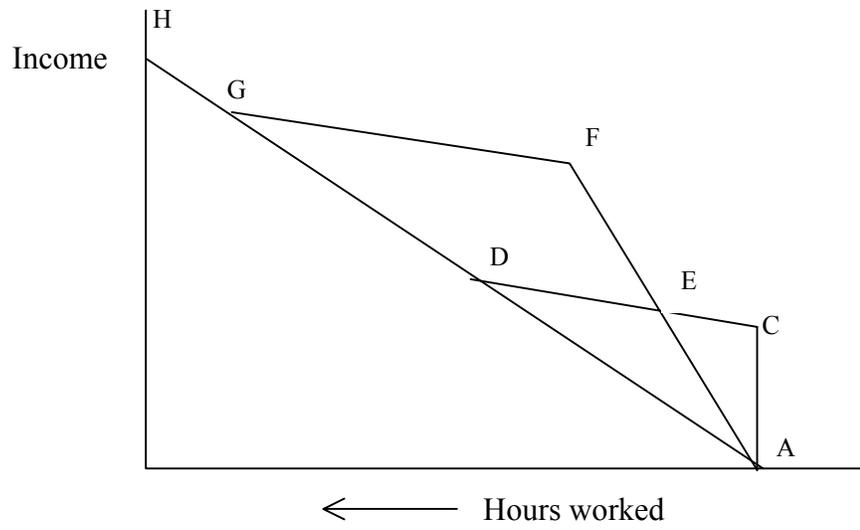
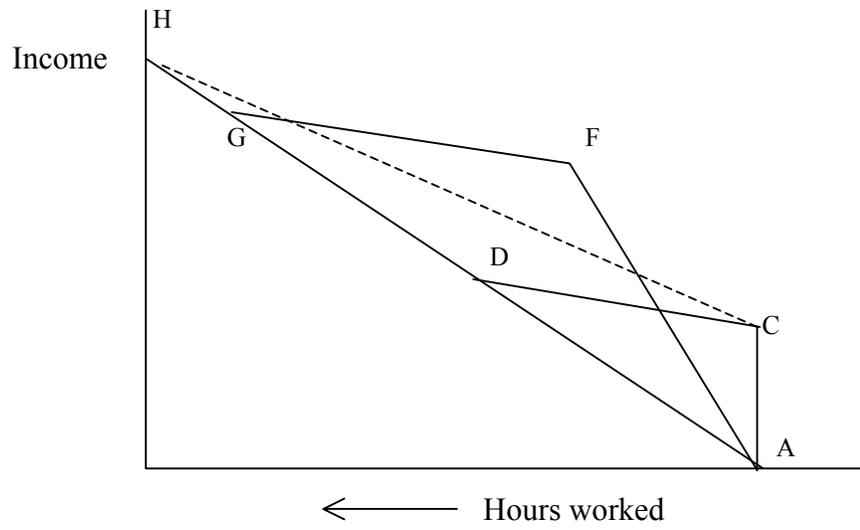


FIGURE 6
Equal-Expenditure NIT



The U.S. EITC dwarfs in generosity anything the cash welfare programs, even with their current low tax rates, have ever produced. The EITC has up to a 40 percent subsidy rate in the negative tax rate region, and has breakeven levels as high as \$32,000 in 2001 (Hotz and Scholz, 2003, Table 1). This compares to breakeven levels for the current cash welfare program in the range \$6,000 to \$12,000 for the majority of states (Gallagher, 1968, Table III.3). Between 1990 and 1996, the period when the generosity of the EITC was most expanded, expenditures in the program tripled, rising to \$24 billion (Moffitt, 2003a, Table 1). EITC expenditures in 1996 passed those in the AFDC program, and the gap has widened since that time. The caseload of cash welfare in 2000 was 6 million, compared with 55 million in the EITC program (Moffitt, 2003a, Table 3).

Thus the United States has an effective NIT far beyond that conceived by Friedman. The level of G has been kept relatively low but the implicit, average tax rate is also extremely low, leading to a combined welfare-EITC caseload of 61 million and corresponding high expenditures.¹⁶ The major remaining question is whether average labor supply has been increased or decreased as a result of this super-NIT. On this score, the evidence suggests that the labor supply of single mothers has been increased but that of secondary workers, primarily married women, has been reduced (Hotz and Scholz, 2003). The net positive effect for women is a reflection of the concentration of that population group in the lower income ranges, where the EITC should tend to increase work. The net negative effect for secondary workers is a reflection of the heavy representation of that group in the phaseout region of the EITC. Thus, partly as expected, different groups have different labor supply effects depending on their locations up and down the budget constraint. Like all NIT plans, the reduction of marginal tax rates at the lower end is necessarily accompanied by an increase in marginal tax rates at the higher end, with predictable labor supply effects.

¹⁶The 61 million figures includes married families, even though they are generally excluded from the welfare system, and is not the figure for single mothers alone.

Work Requirements

Work requirements have been a growing feature of U.S. welfare policy starting in the 1970s, and have recently become the central element of the cash welfare program for single mothers. After the failure of the Nixon administration's proposed NIT, work requirements were proposed by the Carter administration, albeit coupled with a major public service employment program. The Reagan administration encouraged states to experiment with mandatory work programs in the 1980s, and states did so but kept them on a small scale. However, in the early 1990s states began imposing mandatory work requirement programs on larger fractions of their caseloads and, in 1996, the federal government passed legislation requiring states to enroll minimum fractions of their caseloads in work or in a work-like activity (e.g., job search), specifying minimum hours requirements (20 hours per week, rising to 30 per week), and specifying the types of activities that could be counted toward the minimum requirement (e.g., general-purpose education and training were excluded). The work requirements adopted by the states thereafter greatly reduced the number of exemptions allowed, and imposed much stronger sanctions for noncompliance, sanctions resulting in partial benefit penalties or full termination from the welfare rolls.

The critical issue of who is deemed as employable and therefore subject to the work requirements and who is not is still evolving and has not been a central focus of state discussions. Exemptions vary greatly from state to state, and there is some question about the degree to which they are enforced (i.e., how many of those deemed employable actually do work). Discretion, the predictable accompaniment of work requirements, appears from anecdotal evidence to be widespread (Lurie, 2001). Caseworkers make judgments about whether individual recipients have made sufficient effort to find a job, for example. No evidence is available on the overall accuracy of the employability distinctions. The welfare caseload has dropped by a historical amount, falling by over 50 percent in a few years, consistent with the screening arguments of Besley and Coate.

Other consequences of this shift are as predicted. Expenditures per recipient have increased, as a significant increase in administrative costs has been necessary to operationalize the system. The government, contrary to Friedman's idea of a negative income tax, is more heavily involved in regulating the individual lives of welfare recipients than at any point in the history of the program. On the other hand, the prediction that work requirements allow an increase in expenditure on those in greatest need also has support. States have used the monies freed up by the reduced caseloads to create new programs to address special problems for the remaining recipients, such as special job search programs, substance abuse treatment programs, and the like.

The seeds of the work-requirement philosophy appeared in the defeat of the Nixon administration's NIT plan. According to the most authoritative account of the congressional debate (Moynihan, 1973), the NIT foundered when members of the Senate were told that the existing welfare program had nonzero work disincentives, which was judged to be politically unacceptable. A program which merely reduced those disincentives became of little interest. By this account, politicians showed themselves to be unwilling to accept the existence of work disincentives arising from an open-ended provision of G to a population, and therefore unwilling to make the G - t tradeoffs that are required when designing an NIT or when working within the traditional Mirrlees-Fair framework. This represents a fundamental rejection of the NIT philosophy.

This development also sheds a somewhat different light on the super-NIT created by the combination of the earnings subsidy and cash welfare discussed above. The combined program portrayed in Figure 5 is available only to those who are judged unable to work, for only that group is allowed a nonzero G . For those judged capable of working, Figure 4 is the relevant constraint—that is, no income support is provided.

Multiple Programs

A critical feature of Friedman's idea of a negative income tax was that it should replace all existing programs. In this regard, U.S. policy has again moved in the diametrically opposite direction.

Table 3 shows the growth of expenditures on means-tested transfer programs in the United States from 1968 to 2000. The largest growth has occurred in the medical programs, primarily Medicaid, which has experienced a major increase. The growth in medical expenditures from 1988 to 2000 was, by itself, larger than the 2000 expenditures of any of the other expenditure categories. The growth was partly the result of increasing expenditures on the aged and disabled, but also partly the result of the extension of eligibility for benefits to additional groups in the low-income population (Gruber, 2003). Cash transfers also grew, primarily as a result of the EITC and programs for the disabled (the Supplemental Security Income program). Also experiencing growth were programs supporting expenditures on food, housing, education, training, social services (which includes child care), and energy. Total per capita expenditures on all programs combined have risen over time as well, but the composition has clearly shifted toward in-kind programs and special-purpose programs for different populations.

This increasing categorization of the population springs from the same source as does the preference for work requirements, which is to divide the population into different boxes according to characteristics that are presumed to proxy different types of need, and with a different program for each. Different individuals are "tagged" for different programs, and each program is given its own benefit schedule. In addition, the shift to in-kind transfers and away from cash transfers can be traced to the same source; if each segment of the population has a different set of needs, then they should be provided with the goods that address those needs rather than cash. This can be rationalized by a model in which the voter's utility function contains not the utility of the poor individual, but rather that individual's

TABLE 3
Composition of Real Expenditures on Means-Tested Transfers, 1968–2000
(millions of FY2000 dollars)

	Medical	Cash	Food	Housing	Education	Jobs/ Training	Services	Energy
1968	24,122	37,810	4,486	3,933	4,320	3,777	2,507	0
1978	65,080	65,406	25,099	20,650	11,514	26,119	11,439	730
1988	96,029	66,729	31,177	23,173	17,068	5,577	9,620	2,921
1995	196,922	103,291	43,558	35,764	18,146	6,132	12,775	1,896
2000	225,858	91,703	34,347	34,906	20,385	7,347	20,724	1,715
Share of Total (%)	57	15	8	9	5	1	5	1

Source: Moffitt (2003a).

Note: Combined federal and state and local.

consumption of specific goods deemed desirable to the voter.¹⁷ In either case, clearly the U.S. voter is revealed by these preferences to be highly paternalistic, preferring that specific groups be judged as deserving and that they consume specific goods viewed as meritorious by the voter.

It is useful to separate the different issues raised by this increasing categorization and to analyze each alone. The administrative cost of such a system clearly exceeds that of an NIT, but a separate issue is the burden of the system on the recipients themselves, as they must travel to different offices to establish eligibility and to comply with each program's requirements. Evidence has been assessed showing that the participation rates of eligibles decline when programs multiply for this reason.¹⁸ This could be addressed with one-stop-shopping offices which establish eligibility for multiple programs and dispense benefits in one location. A different issue is the potentially high cumulative tax rates from participation in multiple programs emphasized by Friedman, a problem whose seriousness is not quite so obvious given the ambiguity of the sign of welfare tax rates on labor supply noted above. However, it is certainly injurious to the more narrow goal of increasing labor supply among the poorest individuals. Cumulative tax rates in the United States from participation in multiple programs are nevertheless not as high as might be expected because of the recent reductions in welfare tax rates and the EITC. In the zero-to-part-time range, cumulative tax rates are no more than 30 percent and they are no more than 47 percent in the part-time-to-full-time range (Moffitt, 2002). At higher wage levels, however, the phaseout region of the EITC is reached and, for those individuals still eligible for some other transfer programs,

¹⁷A different rationale for in-kind transfers, at least if they are offered in fixed quantity and not in the form of an open-ended price subsidy, is that they may be used to induce only those families who are most needy (i.e., have highest marginal utility from benefiting from the good in question) to select themselves into the program. See Nichols and Zeckhauser (1982) and Blackorby and Donaldson (1988) for models of this type, and Heckman (1974) for an empirical illustration in the case of a child-care tied transfer. This argument has not played an important role in policy circles, for while participation rates of eligibles are often less than 100 percent, this has been judged to be partly because of lack of information on eligibility and other barriers to entry. Indeed, in some programs, it appears that the worst-off individuals, who are presumably those who would benefit the most, have the lowest take-up rates.

¹⁸For example, when recipients leave the cash welfare program, their participation rates in in-kind programs drop because of the difficulty in visiting different welfare offices (Garrett and Holahan, 2000; Zedlewski and Brauner, 1999).

cumulative tax rates can be as high as 80 percent. This nonlinear schedule should be expected to encourage individuals to work up to part-time or full-time at their existing, low hourly wage rates, but to discourage them from obtaining higher wages.¹⁹

Finally, evidence on the issue of whether individuals have incentives to change categories is still incomplete. On the classic issue of whether the essential restriction of cash welfare to single mothers induces nonmarital childbearing and discourages marriage, the evidence indeed suggests that there is some nonzero effect of this kind, although the magnitude is quite uncertain (Moffitt, 2003b). There is anecdotal evidence that women with children who are disabled switch between cash welfare and disability programs to maximize benefits or to avoid work requirements. There is essentially no evidence to date, however, on whether single mothers act to avoid work requirements by changing behavior to become exempt.

CONCLUSIONS

The idea of a negative income tax promulgated by Milton Friedman and elaborated upon by him and Rose Friedman has had a fundamental impact on economic research, as most of that research is motivated by the NIT as an ideal case and is designed to either measure its effects or establish alternatives. In this sense it is the touchstone of economic analysis of welfare programs. In the U.S. policy environment, there have been some developments which have taken the NIT idea further than the Friedmans could have envisioned, but others that run fundamentally in opposition to it.

¹⁹Interestingly, this pattern of low marginal tax rates at the bottom and higher marginal tax rates higher up the income distribution—plus presumed low tax rates again at the very top of the income distribution (certainly lower than 80 percent)—fits the textbook optimal tax model of Mirrlees, where a zero marginal tax rate at the top and bottom is optimal under certain conditions (see Auerbach and Hines, 2002, for a recent review of this literature and the assumptions needed for it to go through).

Despite the several academic objections to the NIT and despite its mixed policy record, its basic message that incentives matter has gotten through and has been its largest success. Although this is not surprising for academic economists, for whom incentives have always been central to economic analysis, it is a new development in policy circles. In the early 1990s, federal policy makers in the United States did a 180-degree turn from designing welfare policies on the assumption of zero behavioral elasticities to designing welfare policies on the assumption of large, nonzero elasticities. While both carrot and stick policies have been put into place, and only the former are in the spirit of an NIT, both are intended to induce recipients to undertake behavior that the voters deem desirable. It is in this sense that Friedman's idea shows the power of basic economic reasoning to affect policy as well as research.

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