CONCEPTUAL ISSUES IN COST/BENEFIT ANALYSIS OF WELFARE-TO-WORK PROGRAMS

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During the 1980s, a number of states operated welfare-to-work programs on a demonstration basis and subjected these demonstrations to formal cost/benefit evaluations. This paper examines the evaluators' methods and summarizes and interprets their findings. Cost/benefit analysis of welfare-to-work programs can provide a rough but useful assessment of a program's efficiency in reducing welfare caseloads. But the evaluation results are more difficult to interpret than they may appear to be. For example, the results typically imply that such programs produce small net gains to society when gains and losses are measured in terms of net income. However, a sensitivity analysis measuring net gains and losses to welfare recipients in terms of changes in net utility suggests that an important modification to the evaluators' methodology might well reverse this finding in many instances.

I. INTRODUCTION

During the 1970s and 1980s, many states conducted demonstration programs in an effort to reduce dependency among welfare recipients by enhancing their employability. The components of these Welfare Employment Programs (WEPs) varied but usually included one or more of the following: assessment of basic skills, structured job search, training and education, and subsidized employment in the public or private sector.

Analysts have subjected many, although far from all, WEP demonstrations to formal cost/benefit analyses. These analyses—especially those based on the Work/Welfare Initiative Demonstrations conducted by the Manpower Demonstration Research Corporation (MDRC) in the 1980s—exerted considerable influence on the Family Support Act of 1988, the nation's most recent attempt at welfare reform. From these analyses, many policymakers concluded that WEPs are cost-beneficial. For example, Ron Haskins, a House of Representatives staffer directly involved in drafting the Family Support Act of 1988, writes that "when subjected to rigorous analysis, most of the programs also were shown to produce net benefits" (1991, p. 620). Similarly, Haskins's counterpart on the Senate side, Erica Baum (1991, p. 609), states that "it appeared as if, over time, the benefits of (WEPs) would equal or exceed the costs." Finally, Peter Szanton (1991, p. 596) asserts that "the programs were cost-effective. In most cases, they benefitted both participants and tax-payers."

Although WEP cost/benefit analyses have led to rather strong policy conclu-

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sions, the analyses themselves have undergone relatively little critical assessment. Thus, the study presented here examines conceptual issues concerning these analyses. Section II begins by outlining the WEP cost/benefit accounting framework. Section III raises a number of conceptual points concerning this framework, placing particular emphasis on one specific WEP component: mandatory community work experience programs (CWEPs). Such programs typically require welfare recipients to work a specified number of hours each month at a government or nonprofit agency in exchange for their grant. Among WEP components, CWEPs are of special interest because they most closely embody the original notion of "workfare," a concept that received considerable emphasis during the 1980s. However, Section III raises many points that also pertain to other WEP components. Section IV illustrates the relevance of these conceptual points by examining findings from MDRC's cost/benefit analyses of the Work/Welfare Initiative Demonstrations. Section V offers some brief conclusions.

II.   THE COST/BENEFIT FRAMEWORK

Stated in the simplest terms, the objective of WEP cost/benefit analyses is to measure all program costs and benefits and to determine whether the latter outweigh the former. In practice, analysts can never fully realize this objective because not all WEP costs and benefits are measurable, and even when they are, measurement errors often occur (see Sections III and IV). Thus, policymakers cannot use cost/benefit analysis in a simple, straightforward manner to decide whether a WEP should continue operating. However, cost/benefit analysis can facilitate that decision by organizing what is known and unknown about the program, thereby permitting rough assessments of efficiency and focusing attention upon those outcomes and costs requiring political evaluation.

Table 1 presents a stylized version of the basic cost/benefit accounting framework that has been popular since the late 1970s for evaluating training and employment programs, including WEPs. Details concerning specifics of the cost/benefit typology vary among WEP evaluations due to the nature of the treatment and the vintage of the report. However, table 1 lists those benefit and cost components that typically have been measured and evaluates them from three separate perspectives: society as a whole; clients served by the evaluated demonstration program; and nonparticipants, including taxpayers who paid for the program. Plus signs indicate anticipated sources of benefit, and minus signs indicate anticipated sources of cost from each perspective. Benefits and costs to society simply are the algebraic sum of benefits and costs to clients and to nonparticipants, since society is the sum of these two groups.

Table 1 does not include intangible benefits and costs—for example, the values of leisure foregone and satisfaction gained from substitution of work for welfare. WEP evaluations almost never measure such effects due to the difficulty of doing so. A later section of this paper examines the implications of this omission.

III.   METHODOLOGICAL ISSUES

The accounting framework illustrated in Table 1 offers several advantages: policymakers readily understand it; it suggests some distributional implications of the program being evaluated by displaying benefits and costs from the perspectives of both participants and nonparticipants; and, possibly most importantly, it is operationally feasible since analysts actually can measure each cost/benefit component listed. However, in some respects, the framework is not completely consistent with current cost/benefit theory.

TABLE 1
Stylized Cost-Benefit Framework for WEP Demonstrations

	Social (A) (B+C)	Client (B)	Nonparticipant (C)
Output Produced by Clients			
In-Program Output	+	0	+
Gross Earnings	+	+	0
Fringe Benefits	+	+	0
Client Work-Related Expenditures			
Tax Payments	0	–	+
Expenditures on Child Care, Transportation, etc.	–	–	0
Use of Transfer Programs by Clients			
Transfer Payments (e.g. AFDC, Food Stamp, Medicaid, Unemployment Insurance)	0	–	+
Program Operating Costs	+	0	+
Use of Support Programs by Clients			
Support Services Received by Clients	–	0	–
Allowances Received by Clients	0	+	–
Program Operating Costs	–	0	–

These inconsistencies potentially can lead to incorrect policy conclusions. Thus, the following subsections compare some of the operational measures of WEP evaluation benefits and costs with their conceptually correct counterparts.

A. *Benefits and Costs: A Client Perspective*

Figure 1, which is a standard labor-leisure indifference curve diagram, identifies theoretically correct measures of major WEP benefits and costs to participating welfare clients. In figure 1, AM represents the budget constraint a client would face in the absence of welfare programs, while DFM represents the budget constraint she faces in their presence. (For the moment, ignore budget line AN.)

Figure 1 assumes that (i) the client represented in the diagram would earn the minimum wage if she works at an unsubsidized job, (ii) she is eligible for welfare, but every dollar she earns reduces her welfare payment by one dollar (an implicit tax rate of 100 percent), (iii) a condition of receiving welfare is that she work at a CWEP job for a number of hours, h*, determined by dividing her grant amount, JI, by the minimum wage, and (iv) her indifference curves are negatively sloped throughout the relevant range. The last of these assumptions is standard. The others, which together approximate the situation that many CWEP demonstration participants face, keep figure 1 from becoming cluttered and do not affect the conclusions presented below.

FIGURE 1

Coupling the assumption that the client potentially could earn the minimum wage with the assumption concerning the CWEP hours requirement implies that the client would be located at the welfare program break-even, point F, while participating in CWEP. The assumption that the welfare program has a 100 percent implicit tax rate implies that the client would prefer point D—that is, zero hours of work—to either point F or point G, both of which are located on lower indifference curves. The 100 percent tax rate assumption permits one to determine the equivalent variations—that is, changes in the client's welfare—associated with different policy changes by comparing the points at which various indifference curves intersect with the right vertical axis of figure 1. For example, the CWEP program forces the client from point D to point F, located on a lower indifference curve. DB represents

the equivalent variation associated with this loss; that is, the monetary amount that would exactly compensate the client by returning her to her original indifference curve.

Figure 1 compares the theoretically correct equivalent variation measure of CWEP participation cost to the client with the operational measure that CWEP cost/benefit analysis typically uses. This latter measure, read off the left vertical axis of figure 1, simply is the net change in client income that results from imposing a CWEP program. Since neither transfer payments nor earnings change under CWEP, the client's net income, JI, also is unchanged. Thus, a conventional cost/benefit analysis will understate the cost to the client of working in a CWEP job, DB.

This assertion is subject to two qualifications. First, although theoretically program cost measurements should be in

terms of either equivalent or compensating variation, these measures are extremely difficult, if not impossible, to make operational. In contrast, changes in income flows are readily observable. Second, the assumption that time devoted to CWEP activities diminishes well-being—that is, that the client's indifference curves are negatively sloped—influences the size and even the direction of the error resulting from using observed changes in net income rather than using equivalent variation as the cost/benefit measure. For many welfare recipients, CWEP participation may in and of itself be a good. Indeed, surveys suggest that many CWEP participants enthusiastically consider the opportunity (Friedlander et al., 1985a and 1986; Goldman et al., 1986). If so, indifference curves with positive rather than negative slopes would better illustrate client preferences. Evidence presented in Section IV, however, suggests that most AFDC recipients' indifference curves are negatively sloped.

Now, consider a different situation: the benefits and costs associated with a client's move from welfare to an unsubsidized job. This is, of course, a major WEP objective, and evaluations suggest that WEPs often successfully meet this goal. Figure 1 implies that the CWEP illustrated in the diagram would have its desired effect. Although the client would prefer not to work in the absence of the CWEP program (point D), she would select working at an unsubsidized minimum wage job (point G) over participating in CWEP (point F). In actual practice, the client might move directly from welfare to the job upon being confronted with the CWEP requirement, or, alternatively, the client might first participate in CWEP while seeking private sector employment.

Comparing the operational cost/benefit measure of the client's move to private sector employment with the corresponding conceptually correct measure yields an interesting finding. On the one hand, the operational measure implies that the client enjoys a net gain. Transfer payments fall from JI to zero, but earnings increase from zero to KI, resulting in a net increase in income of KJ. On the other hand, measured in terms of equivalent variation, the client suffers a net loss equal to DC. Thus, the conclusion drawn from the operational measure is the opposite of that based on the conceptually correct measure.

An additional possibility is that CWEP, perhaps augmented by job search or training, helps the client secure a better job than she otherwise would. Figure 1 represents such a post-CWEP period as a move between budget constraints, from AM to AN, permitting the client to reach equilibrium at point H rather than at point D. Therefore, the client is better off. As figure 1 indicates, the equivalent variation associated with the program, equal to ED, is positive. However, the client's net gain in income, LJ, is even larger. Hence, as in the previous two cases, if the client's indifference curves are negatively sloped, the operational measure of the client's benefits and costs will overstate her true net gain (or understate her true net loss).

B. *Benefits and Costs: The Nonparticipant Perspective*

1. *Intangible Benefits.* The preceding section emphasized that one should estimate changes in utility when measuring clients' WEP benefits and costs. The same concept applies in measuring nonparticipant benefits and costs. As the general political support for WEPs suggests, WEP-induced reductions in welfare recipients' leisure time may increase some nonparticipants' utility. In principle, cost/benefit analysis of these programs should incorporate this intangible WEP benefit. However, this has never been done due to practical difficulties.

2. *In-Program Output.* The procedures that evaluators have used to measure the value to nonparticipants of CWEP participants' in-program output implicitly rest upon a key assumption regarding bureaucratic behavior: that government and nonprofit agencies employing CWEP workers base their decisions on taxpayers' desires. More specifically, these evaluators implicitly analogize government and nonprofit agencies with competitive private sector markets. They assume that the wage an agency would be willing to pay to employ an additional worker corresponds to the value taxpayers place on the additional output the worker would produce. This obviously is a strong assumption. Let us first examine a situation in which it is valid.

Figure 2 represents a government or nonprofit agency that might be assigned CWEP workers. The horizontal line, S, represents the labor supply curve, set at the market determined wage that the agency must pay each low skilled worker it hires. The downward sloping line, D, represents the agency's demand curve for low skilled workers, assumed to slope downward as a result of diminishing returns and (as implied by the bureaucratic behavior assumption) because the agency prioritizes its tasks so that, as its budget expands, successively less important services are performed. (Ignore curve D* for the moment.)

Figure 2 indicates that, in the absence of CWEP workers, the agency would hire R regular workers. However, if a CWEP program provided the agency with P participants, the agency would employ a total of R+P workers. Thus, if the bureaucratic behavior assumption is valid, the value to taxpayers of the CWEP workers' additional output would equal area A. Unfortunately, however, typically direct measurement of Area A is impossible since government and nonprofit agencies rarely sell their output in market transactions. Consequently, the demand curve depicted

in figure 2 is unobservable. However, even though government and nonprofit agencies that "employ" CWEP participants pay nothing for participants' services, one readily can value the area under the supply curve between R and R+P simply by determining the wages and fringe benefits that these agencies would have to pay workers hired in the open market to do the CWEP participants' jobs. Consequently, evaluators usually use the area under the supply curve—that is, area A *plus* area B—as the measure of CWEP output value.

Let us now look at a situation in which the bureaucratic behavior assumption is invalid because an agency produces less output than taxpayers collectively desire, perhaps due to budget constraints resulting from the public good characteristic of its services. The two demand curves in figure 2 represent these circumstances. As before, curve D indicates *agency* demand for workers, but the area under demand curve D* now represents the value that *taxpayers* place on the agency's output. Consequently, the value to taxpayers of the P CWEP participants' additional output now equals the sum of areas A, B, and C. Thus, under these circumstances, the supply curve based measure of the CWEP workers' output (that is, areas A plus B) understates the true value by an area equal to C.

3. *Public Sector Displacement.* So far, the analysis here has presumed that an agency simply would add available CWEP workers to the regular work force that it would hire in the absence of CWEP. This need not be the case. The agency instead might substitute CWEP workers for regular workers. In terms of figure 2, this behavior on the agency's part, which is usually referred to as "displacement," would increase total agency employment by less than the P number of CWEP workers it was provided, resulting in an overstatement of the value of CWEP participants' output.

FIGURE 2
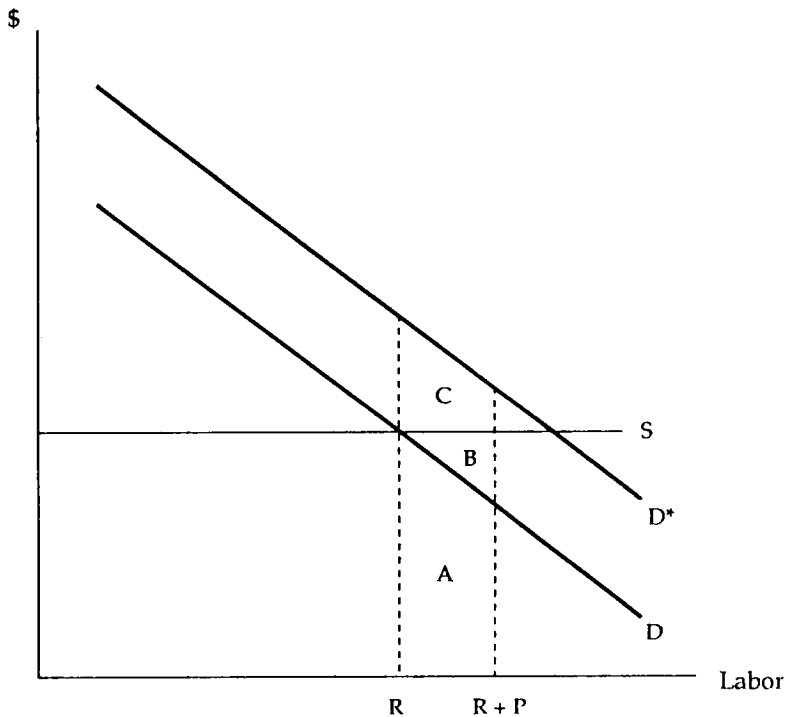
Several WEP evaluations that investigated this issue by surveying agencies employing CWEP workers consistently found displacement to be very small (see, for example, North Carolina DHR, 1985, pp. 19-20; Goldman et al., 1986). However, while these findings are suggestive, they are far from definitive. For example, evaluators limited their examinations of displacement to the demonstration period. Long-run displacement under a permanent CWEP program could be far greater than that occurring during a demonstration.

4. *Private Sector Displacement.* Most WEP demonstrations have aimed at increasing program participants' unsubsidized private sector employment. To the extent that these efforts were successful, some participants undoubtedly took jobs that nonparticipants otherwise would have held. If these nonparticipants became unemployed or accepted lower wage jobs as a result, the WEP obviously imposes a cost on them. WEP cost/benefit analysis has not measured this cost, which is another displacement effect. However, this cost's importance depends upon local labor market conditions. For example, if local unemployment was low during the demonstra-

tion period, displaced nonparticipants should have found alternative job opportunities relatively easily and displacement effects should have been small. But if unemployment was high—the actual situation at many WEP demonstration sites—displacement could have been substantial.

C. Benefits and Costs: The Social Perspective

The cost/benefit literature usually emphasizes the social perspective because it provides the most comprehensive viewpoint from which to assess program effects and determine whether a program increases or decreases overall economic efficiency. For example, evaluators who find that a WEP produces a positive net gain for society as a whole can conclude that total available social output has increased and, hence, that the program has improved economic efficiency. However, since WEP evaluations compute social benefits and costs simply by algebraically summing gains and losses to clients with those to nonparticipants, evaluators treat a dollar gained or lost by a client as identical to a dollar gained or lost by a nonparticipant. Consequently, for example, evaluators would conclude that a WEP demonstration that caused welfare recipients' transfer dollars to fall does not affect society as a whole, since benefits to nonparticipants in the form of government budgetary reductions would exactly offset the loss to clients.

A stark example illustrates the shortcoming inherent in this approach. Suppose a state is considering abolishing its AFDC program and conducts a cost/benefit analysis to assess the potential consequences. Using the standard approach, the state probably would find that, from a social perspective, benefits from eliminating AFDC would far exceed costs. For example, an examination of the cost/benefit components listed in table 1 implies that eliminating AFDC would engender two social benefits: (i) elimination of AFDC op-

erating expenditures and (ii) earnings growth that would occur as former AFDC recipients are forced to increase their work hours. Former recipients' increases in the use of child care, transportation, and social service programs would partially offset these benefits but probably only to a small extent.

If a traditional cost/benefit study does indicate that society would be better off by eliminating welfare programs such as AFDC, one might well ask why these programs continue to exist. One possibility is that the convention upon which evaluators base social perspective calculations—that dollars gained or lost by welfare recipients and by nonparticipants are equivalent—does not accurately reflect social preferences. The very existence of welfare programs suggests that society, in so far as the political process expresses its will, is willing to sacrifice efficiency in order to increase the incomes of the poor.

The cost/benefit literature typically treats such issues by using distributional weights that in principle reflect society's view of what constitutes an equitable distribution of income. For example, evaluators might assign nonparticipants' gains and losses a weight of one and WEP demonstration participants' gains and losses a weight greater than one. Given these weights, evaluators could then compute benefits and costs from the social perspective.

Unfortunately, however, the values of weights appropriate for this purpose are unknown. One possible approach to this problem is to use several of the alternative weighting schemes suggested in the literature to conduct sensitivity tests (see, for example, Gramlich, 1981, pp. 118-123; Pearce, 1983, pp. 59-71). A second approach is simply to report unweighted benefits and costs for program participants and nonparticipants but not for society as a whole, thereby requiring policymakers to apply their own set of implicit weights in interpreting the results.

IV.   COST/BENEFIT FINDINGS FROM THE WORK/WELFARE INITIATIVES

Table 2 summarizes results from the Manpower Demonstration Research Corporation's (MDRC) cost/benefit analysis of a 1980s series of WEP demonstrations that enrolled AFDC applicants and recipients: the Work/Welfare Demonstrations. MDRC based its excellent evaluations of these demonstrations on classical experimental designs, and one may view the cost/benefit components of the MDRC evaluations as state of the art. Thus, the findings reported in table 2 are useful in illustrating appropriate and inappropriate conclusions from WEP cost/benefit analyses.

To obtain the estimates reported in Table 2, MDRC needed to incorporate the fact that some benefits and costs of the Work/Welfare Demonstrations extended beyond the demonstration period. For example, as a result of having participated in a demonstration program, some individuals potentially could enjoy increased earnings but only by paying higher taxes, incurring greater job-required expenses, and receiving fewer transfer payments over the remainder of their working lives. Incorporating these streams of future benefits and costs into the cost/benefit analysis required MDRC to specify three important parameters: the time horizon, the discount rate, and the decay rate. (Space limitations preclude discussion of MDRC's assumptions concerning these parameters. For a detailed assessment of these evaluations, see Greenberg and Wiseman, 1991.)

Table 2 separately reports estimates for one-parent (AFDC-R) and two-parent (AFDC-U) households, and when available, for new AFDC applicants and prior AFDC recipients. Parentheses indicate when benefits or costs are in the opposite direction from that intended by the demonstration programs—for example, when net remuneration from employment declines or amounts of transfer payments increase. The first three columns in table 2 present estimated benefits and costs from the client perspective, and the next four present estimated benefits and costs from the nonparticipant perspective. Columns A and D respectively report total net gains (or losses) from these two perspectives, while columns B, C, E, F, and G provide information on the benefit and cost components that together account for these gains (or losses). For example, column B reports clients' estimated *net* gain from employment under each demonstration program—that is, estimates of the sum of increases in earnings, fringe benefits, and any work-related allowances paid under the program less the sum of tax payments and client job-required expenditures on child care and transportation. Column C indicates changes in clients' AFDC and other transfer benefits. Column E presents MDRC's valuations of CWEP output. Column F is the sum of tax increases paid by clients, reductions in transfer payments paid to clients, and reductions in transfer program operating costs, all of which one may view as benefits to nonparticipants. Finally, column G shows the government's cost of operating the treatment programs.

The total net gains and losses implied by columns A and D are not especially large. For example, a program resulting in a net client or nonparticipant gain of $1,000 per treatment group member (a figure that is larger than most of those appearing in either column A or D) and enrolling one million AFDC recipients each year (a figure that seems improbably large) would produce a total annual gain of $1 billion. This gain may be usefully compared to AFDC's budgetary cost, which currently approaches $23 billion per year (U.S. House of Representatives, 1991, table 17). Also note that of the table's 19 sets of estimates, 17 imply net gains for nonparticipants while only 10 indicate net gains for participants. In nine cases, the demonstrations apparently did not result in large enough earnings gains to offset participant losses in transfer payments.

TABLE 2
Summary and Sensitivity Tests of Cost-Benefit Estimates from MDCR Evaluations of the Work/Welfare Initiative

	Client Perspective			Nonparticipant Perspective				Social Perspective			
	Client Net Present Value [A=B-C] A	Gains From Employment B	Loss in Transfer Payments C	Non Participant Net Present Value [D=E+F-G] D	Value of CWEP Output E	Tax Transfer Gains F	Program Operating Costs G	Unadjusted Social Net Gain (or Loss) [B-C+E+F-G] H	Net Social Gain (or Loss) if Participant Distributional Weight=2 [2(B-C)+E+F-G] I	Net Social Gain (or Loss) if Value of CWEP Output=0 [B-C+F-G] J	Net Social Gain (or Loss) if Value of Foregone Leisure= Value of the Net Gain from Employment [-C+E+F-G] K
AFDC-R APPLICANTS											
San Diego I											
Job Search Only	$ 644	$1,323	$ 679	$ 452	($3)	$ 965	$ 510	$1,096	$1,740	$1,099	($227)
Job Search + CWEP	798	1,874	1,076	1,155	205	1,529	579	1,953	2,751	1,748	79
San Diego II	(880)	1,140	2,020	1,633	180[a]	2,153	700	753	(127)	573	(387)
Virginia	1,134	1,698	564	667	41	879	253	1,801	2,935	1,760	103
West Virginia	(481)	(407)	74	389	542	25	178	(92)	(573)	(634)	N. A.
RECIPIENTS											
San Diego II	725	3,158	2,433	1,698	180[a]	2,586	1,068	2,423	3,148	2,243	(735)
Virginia	574	982	408	190	145	593	548	764	1,398	619	(218)
West Virginia	80	157	77	873	1,069	115	301	953	1,033	(106)	796
New Jersey	1,262	2,278	1,016	1,069	(9)	1,591	513	2,331	3,593	2,340	53
Maine	3,182	4,497	1,315	(419)	680	894	1,993	2,763	5,945	2,083	(1,734)
APPLICANTS & RECIPIENTS											
Cook County											
Job Search Only	(420)	145	565	475	1	601	127	55	(365)	54	(90)
Job Search + CWEP	(34)	311	345	362	100	420	158	328	294	228	17
Baltimore	1,739	1,939	200	74	390	513	829	1,813	3,552	1,423	(126)
Arkansas	(449)	410	859	944	20	1,082	158	495	46	475	85

TABLE 2 continued

Summary and Sensitivity Tests of Cost-Benefit Estimates from MDCR Evaluations of the Work/Welfare Initiative

	Client Perspective			Nonparticipant Perspective				Social Perspective			
	Client Net Present Value [A=B-C] A	Gains From Employment B	Loss in Transfer Payments C	Non-Partici-pant Net Present Value [D=E+F-G] D	Value of CWEP Output E	Tax Transfer Gains F	Program Operating Costs G	Unadjusted Social Net Gain (or Loss) [B-C+E+F-G] H	Net Social Gain (or Loss) if Participant Distributional Weight=2 [2(B-C)+E+F-G] I	Net Social Gain (or Loss) if Value of CWEP Output=0 [B-C+F-G] J	Net Social Gain (or Loss) if Value of Foregone Leisure= Value of the Net Gain from Employment [-C+E+F-G] K
AFDC-U APPLICANTS											
San Diego II	543	2,083	1,540	1,577	267[a]	1,970	660	2,120	2,663	1,853	37
San Diego I Job Search Only	(1,196)	375	1,571	1,229	(5)	1,777	543	33	(1,163)	38	(342)
Job Search + CWEP	(1,443)	129	1,572	1,414	354	1,732	672	(29)	(1,472)	(383)	(158)
RECIPIENTS											
San Diego II	(921)	2,178	3,099	2,487	267[a]	3,242	1,025	1,566	645	1,299	(612)
APPLICANTS & RECIPIENTS											
Baltimore	(1,223)	(2,017)	(784)	(1,856)	280	(1,599)	537	(3,079)	(4,302)	(3,359)	N.A.

Source: Various final and supplmental reports on individual stat work/welfare demonstration published by the Manpower Demonstration Research Corporation.

Notes: See text for detailed explanation of table. The dollar figures in this table pertain to net gains and losses per treatment group member.

[a]Separate estimates of the value of CWEP output for applicants and receipients not provided for San Diego.

( ): Negative net gains or increases in transfer payment amounts.

N.A.: Not applicable; earnings of participants were found by MDRC to have fallen.

Column H in table 2, which is computed by summing the benefit–cost components reported in columns B, C, E, F, and G, presents estimates of net gains and losses from the social perspective. Sixteen of the 19 reported estimates indicate net gains while only three imply net losses. Taken at face value, therefore, these findings imply that the policies tested in the Work/Welfare Demonstrations generally resulted in modest social net gains. However, any comprehensive assessment must determine whether the estimates reported in column H are sensitive to the assumptions MDRC used to derive them. The remaining three columns in table 2 permit an investigation of this issue.

Column I tests whether the social net gain estimates are sensitive to the choice of distributional weights. In contrast to the figures appearing in column H, which assume that society values the gains and losses of AFDC recipients and non-recipients equally, the figures appearing in column I assume that society values AFDC recipients' gains and losses at twice those of nonrecipients. In other words, participants receive a distributional weight of two and nonparticipants a weight of one. Although these weights obviously are arbitrary, they likely overstate society's generosity towards AFDC recipients and thus test whether the net social gain and loss estimates are sensitive to a rather extreme assumption. Comparing columns H and I indicates that this assumption causes 10 of these estimates to become more positive and nine more negative. More importantly, however, only three change sign. Although all three sign changes are from positive to negative—that is, from a net gain to net loss—in two cases the original estimated net gain was well under $100. Hence, conclusions concerning whether the Work/Welfare Demonstrations were cost-beneficial to society likely are not very sensitive to the choice of distributional weights.

Section III suggests that estimates of CWEP output values could be either over- or understated, depending on whether the agencies employing CWEP participants produce the amount of output desired by nonparticipants and whether CWEP participants displace workers these agencies hire through normal channels. Here the analysis focuses on the implications of a possible overstatement. Thus, column J of table 2 makes the extreme assumption that CWEP output should be valued at zero. As a comparison of this column with column H suggests, the estimates of social net gains and losses are quite insensitive to this assumption, except for the West Virginia demonstration.

Section III implies that if indifference curves representing the tradeoff between income and leisure are negatively sloped, net gains for WEP participants would be overstated (or, alternatively, net losses understated). The best evidence concerning the slope of the indifference curves of low income family heads—that is, persons similar to WEP participants—probably comes from compensated substitution effect estimates based on data from a series of income maintenance experiments conducted during the 1970s. These imply that the indifference curves of the heads of most low income households are not only negatively sloped but probably quite steep (see Burtless, 1986, for a summary of these estimates). This finding suggests that measuring net gains to and losses to Work/Welfare Demonstration participants in terms of income change, as MDRC did, rather than in terms of changes in utility, might produce substantial bias. Column K of table 2 explores this possibility by presenting estimates of net social gains assuming that losses in participants' utility resulting from reductions in leisure fully offset any increases in participants' utility resulting from higher earnings. Although this assumption may seem excessive, the analysis in Section III suggests that, under certain cir-

cumstances, a WEP actually may cause losses in utility resulting from leisure reductions to exceed the increases in utility resulting from income gains.

Comparing columns H and K indicates that the estimates of net social gains and losses are quite sensitive to this assumption, with virtually all estimates becoming substantially more negative and nine of the 16 initially positive estimates taking on negative values. In interpreting these findings, however, one must consider two situations in which the assumption that gains in earnings were *fully* offset by losses in leisure is almost certainly too strong. The first occurs when WEP programs help clients obtain a better job— that is, move them to a more steeply sloped budget constraint. Although most Work/Welfare Demonstrations put little emphasis on augmenting participants' human capital, both the Baltimore and the San Diego II demonstrations did. The second situation occurs when WEP participants do not consist of the general AFDC population, but of persons who desire to participate. Such persons voluntarily relinquish leisure; thus, their indifference curves may be much less negative than those of typical welfare recipients. Participation in only two of the Work/Welfare

Demonstrations—those in New Jersey and Maine—was voluntary. However, while participation in the remaining demonstrations was mandatory, this provision was more strongly enforced in some (for example, those in San Diego) than in others (for example, the one in Baltimore).

V. CONCLUSIONS

This paper has suggested that WEP cost/benefit analyses are more difficult to conduct successfully and to interpret than they may appear to be. Nevertheless, they can provide useful insights. For example, MDRC's cost/benefit analyses of the Work/Welfare Initiative demonstrations imply that the tested policies resulted in modest net *social* gains. Sensitivity tests suggest that, with one important exception, this finding is quite robust with respect to alternative assumptions. The exception concerns the value of the demonstration participants' leisure time. Had evaluators taken the value of participant's leisure time into account, the positive findings for a number of the demonstrations might well have been reversed. Thus, techniques for incorporating the value of WEP participants' leisure time into WEP cost/benefit analyses are an important topic for future research.

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