WHAT COUNTS? WHAT DOESN’T? DOES IT MATTER?
THE ACCOUNTING STANCE IN LABOR/SOCIAL POLICY BENEFIT-COST ANALYSIS

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The Issue

“Identifying and measuring the full range of impacts is difficult but necessary.”

“A roughly measured impact is a better starting point for analysis than one that is ignored and therefore implicitly assumed to be zero.”

David Weimer and Aidan Vining
Investing in the Disadvantaged
2009

“[A]ll outcomes in both the short and long run affected by the program for all relevant parties should be valued in the BCA, whether those outcomes produce benefits or costs to the various stakeholders.”

Lynn Karoly
“Toward Standarization of Benefit-cost Analyses of Early Childhood Interventions”
Rand, 2010
The Setting

- The basic purpose of BCA is to identify the social efficiency impacts of public sector choices. This requires that the full welfare impact of an intervention on citizens be measured and valued.
- Many of the social benefits and costs can be identified, but are difficult to empirically measure and value.
- The theory of welfare economics provides a coherent analytic framework for evaluating these impacts. It requires that:
  - **All** of the ‘outputs’ of and ‘inputs’ to an intervention be identified—a comprehensive accounting stance,
  - A clear ‘counterfactual’ to the intervention be identified,
  - The magnitude of the changes to the outputs from the intervention be measured, and
  - These changes be evaluated by the ‘willingness to pay’ and ‘social opportunity cost’ concepts.
- While the basic principle is clear, the benefit-cost profession has a mixed record in fulfilling this mandate.
A Major Advance

- Early benefit-cost studies of the 1950s and 1960s, both academic and other, were very rudimentary in identifying impacts.

- Over time, benefit-cost analysts steadily improved the methods applied in assessing benefits and costs:
  - Procedures for choosing a counterfactual became more clearly defined.
  - The projection of future effects became more sophisticated.
  - The relevant discount rate became more clearly defined.
  - The comprehensiveness of the accounting stance was expanded.

- A major advance in many of these dimensions was the 1981 benefit-cost study of a mental health treatment facility by Burton Weisbrod.


  Even today, that study stands as a landmark in terms of the comprehensiveness of the accounting stance; consider:
Weisbrod’s Mental Health Treatment Program Study: Output and Input Components Estimated and Valued

**Costs**
- Program inpatient and outpatient treatment costs
- Secondary treatment costs—hospitals, sheltered workshops, private medical
- Law enforcement and illegal activities costs—police, courts, property damage, injury to others
- Additional maintenance cost
- Property, wage, and psychic burdens on family
- Property, wage, and psychic burdens on others
- Changes in patient mortality

**Benefits**
- Improved labor productivity: Earnings change
- Changed labor market behavior (e.g., job change)
- Additional education/training
- Improved mental health
- Improved physical health
- Improved consumer decision making
However:

- No deadweight loss due to program financing
- No consumer surplus changes, or welfare losses from increased work hours
- No projected future effects
- No application of ‘even crude’ shadow prices to impacts identified but not valued.
The Job Corps Studies

  
  http://www.jstor.org/stable/3324110

  

- Commendable in the comprehensive approach to benefits and costs, the creative piecing together of needed shadow prices, the care in handling transfers, the incorporation of decay rates, and the disaggregation of net benefits to society into those accruing to program participants and those accruing to the rest of society.
The Job Corps Studies: Output and Input Components Estimated and Valued

Benefits:
- Employment/Earnings of participants (in project and post project)
- Utility from working relative to welfare
- Utility from reduced drug/alcohol dependence
- Reduced administrative costs from lower welfare program usage
- Reduced criminal justice system costs
- Reduced drug/alcohol treatment costs
- Reduced use of alternative services
- Utility from redistribution

Costs:
- Program operating and administrative costs
- Opportunity cost of participant labor
However

- Numerous ‘potential’ impacts not considered:
  - Changes in maintenance cost
  - Changes in property, wage, and psychic burdens on family and others (including displacement effects)
  - Changes in participant mortality
  - Changed labor market behavior (e.g., job change)
  - Additional education/training
  - Improved physical or mental health
  - Improved consumer decision making
  - Taxpayer utility gains from reduced public welfare usage

- No deadweight loss due to program financing
- No participant surplus changes


This paper provides estimates for a comprehensive set of social benefits and costs associated with the federal Housing Choice Voucher (Section 8) program. These estimates rest largely on empirical analyses of the effect of voucher receipt on several recipient and taxpayer behaviors and outcomes that occur in the first year of voucher receipt.
Benefits of Section 8 Program: Conceptual Overview

- Willingness-to-Pay Benefits of Section 8 vouchers to recipients.
  - Financial
  - Excess burden
- Security value of voucher receipt.
- Financial and excess burden effects from changes in other public program benefits.
  - Welfare, Earned Income Tax Credit, Food Stamps, Health care, Child care
- Welfare gains from increased child education and health status.
- Welfare gains from reduced crime-related behaviors.

All of these estimated and valued for participants, non-participants and Society.
Costs of Section 8 Program
Conceptual Overview

- Tax-related costs of voucher provision.
  - Financial
  - Excess burden

- Tax-related costs of increased public program provision caused by voucher receipt.
  - Financial
  - Excess burden

- Welfare losses from distorted labor market responses of voucher recipients.

- Welfare losses from neighborhood effects.

All of these estimated and valued for participants, non-participants and Society.
However

- In spite of long list, some ‘potential’ impacts not considered:
  - Changes in recipient mortality
  - Additional recipient education/training
  - Improved recipient physical or mental health
  - Improved recipient decision making
  - Changes in taxpayer utility
- No projected long-run, dynamic effects
Other Notable Studies


  [http://discovery.ucl.ac.uk/17916/1/17916.pdf](http://discovery.ucl.ac.uk/17916/1/17916.pdf)

- **Early Childhood Interventions** (Rand: Karoly, 2010)
  Emphasizes need for a comprehensive accounting stance, and increased standardization of methods and valuation approaches.


- **Perry Pre-School Program** (JPubEcon: Heckman et al, 2010; Schweinhart et al., 2005)

- **Washington State Institute for Public Policy Studies**
  Series of studies, headed by Steve Aos that measure and monetize several benefit components in studies of sentencing/correction, alcohol, drug and mental health, foster care, preschool.
Among the best-known and most influential benefit-cost studies in the social policy area, a rather narrow accounting stance has become the norm. I’ll refer to this as the **Standard Accounting Stance**.

I’ll illustrate this norm by reference to several studies sponsored by MDRC, including their ‘welfare-to-work’ studies. I could have also used studies by MPR, Abt or other leading policy research organizations.

I do this reluctantly, as the overall contribution of MDRC/MPR/Abt studies and those of the other organizations has been substantial. The overall quality of these studies—from establishing causality through randomized experimentation, to careful analysis of data, to use of sensitivity analysis and shadow values—sets a high bar for all of us. These research groups are innovators in the field.

But, there is still room for improvement and not just for these groups, but for the community of benefit-cost scholars as a whole.
The **Standard Accounting Stance** of MDRC Studies

“The general approach was to focus on effects that are naturally expressed in dollars, such as changes in earnings and public assistance payments produced by the programs.” page 5 (MDRC, “Welfare to Work Programs: Benefits and Costs”)  

**Table 2.1**

*The Expected Financial Effects of Welfare-to-Work Programs*

<table>
<thead>
<tr>
<th>Financial Effect</th>
<th>Accounting Perspective</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
<td>Participant</td>
<td>Budget</td>
</tr>
<tr>
<td>Earnings and fringe benefits</td>
<td></td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>Taxes (including EITC)</td>
<td></td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Welfare</td>
<td></td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Food stamps</td>
<td></td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Medicaid</td>
<td></td>
<td>–</td>
<td>+</td>
</tr>
<tr>
<td>Work experience output</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Administrative cost of transfer programs</td>
<td></td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Operating costs</td>
<td></td>
<td>0</td>
<td>–</td>
</tr>
</tbody>
</table>

Net value (net gain or net loss)        |                         | ?           | ?      | ?       |
So, from Society’s and Government’s Perspective, what does the Standard Approach include?

- **Society:**
  - Changes in earnings and fringe benefits (+)
  - In-program outputs (+)
  - Program administration and operating costs (-)

- **Government**
  - Taxes [including EITC (-)] (+)
  - Savings in Welfare, Food Stamps and Medicaid spending (+)
  - Savings in administrative costs of transfer programs (+)
  - Program operating costs (-)
There are … serious shortcomings with the social perspective as it is used in practice … it is not as inclusive as it should be.”

First, … benefits and costs that do not affect either participants or the government’s budget [e.g., displacement effects, society’s preferences for redistribution or work vs. welfare] are not usually counted."

Second, the …[estimates do] not include nonmonetary effects on participants…[e.g., program-induced changes in education, health status, or families’ or children’s well-being, out-of-pocket work-related expenses by participants on child care and travel, or forgone personal and family activities that might result from increased work].”

Question: Does the accounting stance matter in assessing the benefits and costs of programs?

How do the benefit and cost estimates differ between a ‘comprehensive accounting stance’ and the ‘standard accounting stance’?

Comprehensive—Components of benefits and costs included in the published Weisbrod, Job Corps and Section 8 studies.

Standard—Those components of benefits and cost included in the MDRC framework.

I worked from the detailed benefit and cost estimates in these studies.

Here is what I find:
The Weisbrod Mental Health Study
(estimates from the Journal of Human Resources version)

<table>
<thead>
<tr>
<th></th>
<th>Social Benefits</th>
<th>Social Costs</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Accounting</td>
<td>$1196</td>
<td>$1356</td>
<td>-$160</td>
</tr>
<tr>
<td>Stance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive</td>
<td>$1196</td>
<td>$797</td>
<td>+$399</td>
</tr>
<tr>
<td>(Weisbrod JHR, 1981)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive minus</td>
<td>$0</td>
<td>-$559</td>
<td>+$559</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comprehensive Accounting Stance Net Benefits = +$399
Standard Accounting Stance Net Benefits = -$160

The program passes an efficiency test when evaluated with a comprehensive accounting stance; it does not when evaluated with the standard accounting stance.

The estimates of benefits and costs are first year, per participant.
# The Job Corps Study
(estimates from the Journal of Policy Analysis and Management version)

<table>
<thead>
<tr>
<th></th>
<th>Social Benefits</th>
<th>Social Costs</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting Stance</td>
<td>$5201</td>
<td>$4186</td>
<td><strong>+$1012</strong></td>
</tr>
<tr>
<td><strong>Comprehensive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Long et al (JPAM, 1981))</td>
<td>$7343</td>
<td>$5070</td>
<td><strong>+$2271</strong></td>
</tr>
<tr>
<td><strong>Comprehensive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>minus Standard</td>
<td><strong>+$2142</strong></td>
<td><strong>+$884</strong></td>
<td><strong>+$1259</strong></td>
</tr>
</tbody>
</table>

Comprehensive Accounting Stance Net Benefits = **$2271**
Standard Accounting Stance Net Benefits = **$1012**

The program passes an efficiency test when evaluated with both the comprehensive accounting stance and the standard accounting stance.

The estimates of benefits and costs are discounted present value estimates.
The Section 8 Study
(estimates from the Journal of Policy Analysis and Management)

<table>
<thead>
<tr>
<th></th>
<th>Social Benefits</th>
<th>Social Costs</th>
<th>Net Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Accounting Stance</strong></td>
<td>$0</td>
<td>$1512</td>
<td><strong>-$1512</strong></td>
</tr>
<tr>
<td><strong>Comprehensive</strong> (Carlson, et al, JPAM, 2011)</td>
<td>$10,567</td>
<td>$9012</td>
<td><strong>+$1644</strong></td>
</tr>
<tr>
<td><strong>Comprehensive minus Standard</strong></td>
<td>$10,567</td>
<td>$7500</td>
<td><strong>+$3156</strong></td>
</tr>
</tbody>
</table>

Comprehensive Accounting Stance Net Benefits = **$1644**
Standard Accounting Stance Net Benefits = **-$1512**

The program passes an efficiency test when evaluated with a comprehensive accounting stance; it does not when evaluated with the standard accounting stance.

The estimates of benefits and costs are for the first year, per participant.
What to make of this?

- The accounting stance matters; really matters.
  The bottom lines of the studies vary greatly with the accounting stance chosen, as does the distribution of benefits and costs among participants and non-participants.

- If the standard accounting stance were applied in the published studies, only the Job Corps study would have been found to pass the efficiency test.

- While users of the standard accounting stance emphasize the trade-offs among program goals—and the gains/losses to individual participants—do you learn much if only some of the effects are considered?
  Indeed, with respect to the Section 8 program, the standard accounting stance would have found net participant benefits of +$170 while the more comprehensive accounting stance used by the authors found net participant benefits of $8998!

- With respect to government net impacts, the standard accounting stance and the comprehensive accounting stance find about the same net government costs of these programs.
If one demands the same degree of rigor in estimating ‘non-standard’ benefits and costs as estimating standard effects, don’t the costs of doing the study balloon?

Wouldn’t the extensive use of proxy shadow costs add to unwarranted uncertainty in estimation?

Wouldn’t it be better to state the estimated effect, and then allow the reader to value it?
Further Reflections

- Maybe all that really matters to policy makers is the effect of the program on the government budget. Perish that thought!!!
- If this is the case, benefit-cost analysis (and analysts) have an up-hill battle in persuading policy-makers to adopt the societal perspective.
- Ned Gramlich’s advice: “Sometimes the decision will come out the way indicated by the benefit-cost study. Other times it will not. Do not get discouraged. … If your work is good, over time it will make a difference.”

Thank you!