Benefit-Cost Analysis in Evaluations of U.S. Training Programs

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Why Benefit-Cost Analysis Rather than Cost-Effectiveness Analysis?

- Key benefit of training programs (increased output) easily monetized
- Multiple, diverse benefits
- Investment perspective
Evaluations Discussed

- Job Corps (1980, 2001)
- Job Training Partnership Act (JTPA) Programs (1994)
- New Jersey Job Search Experiment (1989)
Shared Characteristics

- Systematic, comprehensive accounting of benefits and costs
- Multiple perspectives
- Rigorous estimation of benefits; use of random assignment
- Sensitivity analysis
What is Job Corps?

- Intensive intervention for disadvantaged youth
- Primarily residential
- Academic and vocational training
- Social and parenting skills, etc.
- Open entry/exit, average stay 7-8 months
Goals of Job Corps

- Prepare disadvantaged youth for the labor market
- Increase economic output
- Reduce welfare (increase self-sufficiency)
- Reduce crimes and other social problems
Job Corps Evaluation Design

- Random assignment design to estimate net impacts
- All eligible applicants nationwide
- Large samples
- Outcomes based on 4-year observation period
Benefits and Costs of Job Corps

Benefits

- Output value of increased work (earnings + benefits)
- Reduced use of other benefits and services
- Reduced crime rates

Costs

- Program costs
Relevant Perspectives

- Participants
- Everyone else
- Society as a whole
# Benefits and Costs of Job Corps, by Perspective (1995 Dollars)

<table>
<thead>
<tr>
<th>Benefits or Costs</th>
<th>Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Society</td>
</tr>
<tr>
<td>Benefits from Increased Output</td>
<td>$27,531</td>
</tr>
<tr>
<td>Year 1</td>
<td>-1,933</td>
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<tr>
<td>Years 2 to 4</td>
<td>2,462</td>
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<tr>
<td>After Observation Period</td>
<td>26,778</td>
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<tr>
<td>Output in Job Corps</td>
<td>225</td>
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<tr>
<td>Savings in Other Programs and Services</td>
<td>2,186</td>
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<tr>
<td>Benefits from Reduced Crime</td>
<td>1,240</td>
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<tr>
<td>Program Costs</td>
<td>-14,128</td>
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<tr>
<td>Benefits Minus Costs</td>
<td>$16,829</td>
</tr>
<tr>
<td>Net Benefits per Dollar of Program Expenditures</td>
<td></td>
</tr>
</tbody>
</table>
B-C Assessment of Job Corps

- Large gains for participants (= $20,000 per)
- Net costs to others are $3,000 per participant
- Good investment from society’s perspective (net benefits = $17,000 per participant)
- Conclusions depend on long-term earnings gains, which are not observed
JTPA Evaluation

- Included primary adult and youth training programs
- Random assignment design to estimate net impacts
- Outcomes based on 30-month observation period
- Benefit-cost analysis somewhat more limited than in Job Corps
B-C Assessment of JTPA: Adult Women

- 30-month gain in output = $1,703 per enrollee
- Benefits to enrollees = $1,678
- Program costs = $1,146
- Net benefits to society = $532
- Good investment from society’s perspective
- Conclusions not dependent on long-term earnings gains
B-C Assessment of JTPA: Male Youth

- 30-month gain in output = - $949 per enrollee
- Benefits to enrollees = - $620
- Program costs = $2,284
- Net benefits to society = - $2,904
- Poor investment from society’s perspective (as well as from youths’ perspective)
- Conclusions not dependent on long-term earnings gains
Evaluation of the New Jersey Job Search Experiment

- Identify UI recipients who were dislocated workers
- Provide them with mandatory job search assistance
- Impact estimates based on random assignment design
- Outcomes based on one-year observation period
- Potential for reduced UI receipt as well as output gain
B-C Assessment of the New Jersey Experiment

- One-year gain in output = $736 per participant
- Benefits to participants = $492
- Program costs = $154
- Increase in taxes + reduction in benefits = $243
- Net benefits to rest of society (taxpayers) = $89
- Net benefits to society = $581

- Good investment from society’s perspective but also generates net benefits for taxpayers
- Conclusions not dependent on long-term earnings gains
Final Point: Benefit-Cost Findings Influence Policy

- Survival of Job Corps, despite its expense
- Reduction of JTPA youth programs; subsequent replacement of JTPA with Workforce Investment Act
- Establishment of the Worker Profiling and Reemployment Services system