

# Estimating the Long-term Effects of Investments in Children

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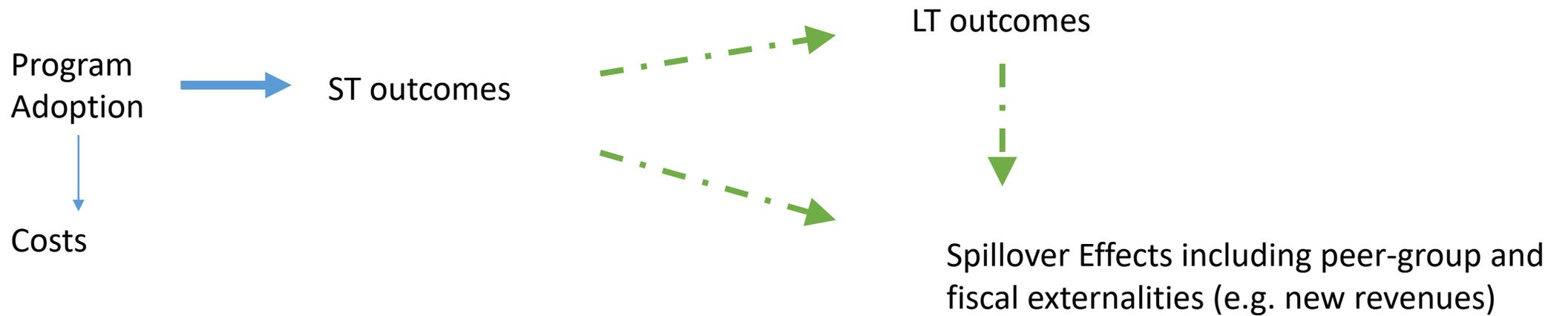
Brookings

May 18, 2021

GOAL:

Determine the “best” set of social programs to achieve a policy objective (e.g. reducing intergenerational poverty) in a cost-effective way.

Most evaluations identify ST Outcomes but not the LT Outcomes needed to assess effects on mobility or intergenerational poverty



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Investments in children or their families

Adult incomes or poverty rates for the children

FOR DETERMINING THE EFFECTS OF PROGRAMS, BOTH INTERNAL AND EXTERNAL VALIDITY ARE IMPORTANT



- RCTs are the holy grail, but other quasi-experimental methods also offer insight. **What criteria can be used to certify a study as “causal”?**
- Even if causality is assured for study group, has the research achieved external validity? (is it still credible under altered contextual conditions or for other groups?)

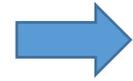
Can a small program be scaled up without losing effectiveness?

**What criteria can be used to certify a study as “externally valid”?**

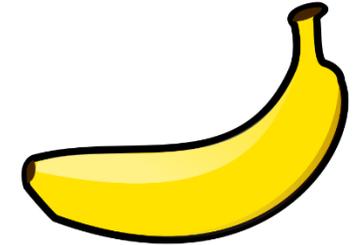
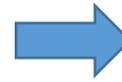
It is hard to compare one program to another unless one can find A COMMON SET OF METRICS (e.g. adult incomes) FOR PROGRAM COMPARISION

Program 1

e.g. Pre-K

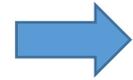


Program 1 Evaluation

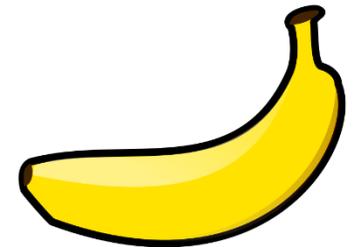
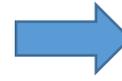


Program 2

e.g. Juvenile justice

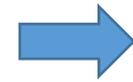


Program 2 Evaluation

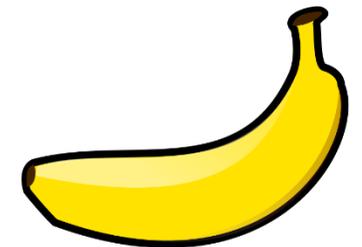
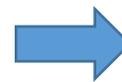


Program 3

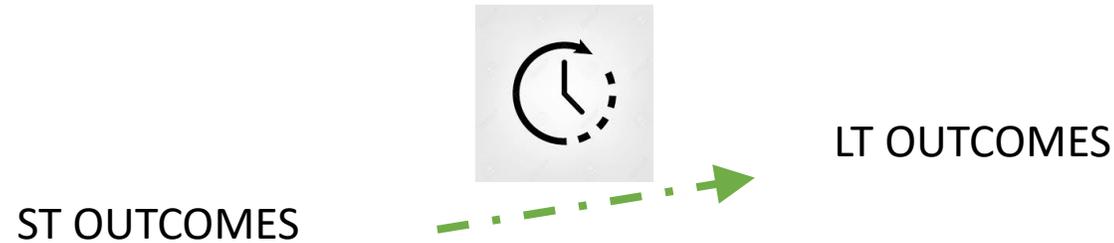
e.g. Pell grant



Program 3 Evaluation



## DERIVING ESTIMATES OF LONG-TERM OUTCOMES FROM SHORT-TERM OUTCOMES IS TRICKY BUT SOME EFFORTS TO DO SO EXIST



What happens over time: fade-out? Sleeper effects? Dynamic complementarities? Diminishing returns?

At the highest level, models for determining long-term outcomes can be classified as either structural or reduced form

- Structural Life-stage Model – e.g. SOCIAL GENOME MODEL
- Reduced Form Model – e.g. SURROGATE INDEX APPROACH
- Other? (Linking short to longer-term outcomes)

Each approach has strengths and weaknesses. Could use a combination of techniques to minimize bias and identify intermediate pathways.

THE METHODOLOGY CHOICES AT EACH LINK APPEAR TO BE INDEPENDENT OF EACH OTHER: IF SO, WE CAN PLAY IN ANY QUARTER OF THE SANDBOX.

Standardizing costs and benefits



Washington State Institute  
for Public Policy (**Hirsch**)

Marginal Value of  
Public Funds (**Hendren**)

Estimating LT  
outcomes

Structural Models  
(Social Genome Model, **Acs**)

Reduced Form Models  
(Surrogate Index, **Rothstein**)




Sources:

[Benefit Cost Model \(WSIPP\)](#); [Marginal Value of Public Funds \(Hendren et al\)](#); [Social Genome Model 2.0 \(Acs et al\)](#); [The Surrogate Index \(Athey et al\)](#)