

The Challenges of Incentive Evaluation in a Time of Pandemic Recession & Recovery

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Incentive evaluation: Is it more difficult due to the pandemic?

- **Pandemic adds “noise”**: economic noise, as recession & recovery will cause large changes in a firm’s jobs or an area’s jobs; policy noise, due to large federal programs (PPP, stimulus)
- **But...** Noise can be controlled for with right comparison groups or controls.
- **The real problem remains: selection due to unobservables**
- **More rules-based incentives easier to rigorously evaluate.**

Example: PPP has already been rigorously evaluated; OZs may NEVER be rigorously evaluated

- PPP has been rigorously evaluated by comparing firms just above and just below size cutoff (typically 500 workers), and by comparing firms with different prior bank relationships.
- Former approach ([Chetty et al.](#), [Autor et al.](#)) find that PPP does create jobs, but at cost per job created in range of \$162K to \$381K. Latter approach ([A. Bartik et al.](#)) finds cost per job of about \$60K, but some estimates imprecise. Both estimates can be “right”.
- Also, descriptive part of research shows that PPP did not go to neediest firms (see also [Granja et al.](#))
- OZ has mostly been evaluated by matching selected OZs (25% of total eligible tracts) to similar eligible tracts. So far, this research has not found much effect on employment or housing prices (e.g., [Atkins et al.](#), [Glaeser et al.](#)) [White House CEA](#) simulated effects based on assumed responsiveness of capital to taxes.
- Why can we rigorously evaluate PPP but not OZs? PPP is allocated based on known rules (firm size) or procedures (bank relationship), and very large share of those qualifying get loans. OZs selected for unknown reasons by states, and only 25% of eligible selected. So we would have trouble comparing selected with unselected eligible, and also in comparing all those who just made cutoff for being eligible with those who just missed.

At state/local level, possibility of true causal evaluation varies greatly, based on program design

- North Carolina job creation credits: Rigorously evaluated, because credit per job varied greatly over counties over time. Credit of \$9,000 per job increases county jobs by 3% ([Perez et al.](#)).
- Washington R&D tax credits: Rigorously evaluated, because credit effect on cost of expanding varied with prior tax liability and per-firm cap. Credit increased jobs, but at high cost, equivalent to \$55K per job per year subsidy. ([Bartik and Hollenbeck](#)).
- Michigan Business Development Program: Could not be rigorously evaluated, because program is highly selective among eligible firms. So evaluated via simulation methods of plausible impacts ([Bartik, Harpel, et al.](#))
- Why difference: NC and WA cases: credits widely used, and use varied according to known rules. MBDP: credits highly selectively used, and selection is subjective. And comparing eligible with ineligible not feasible because only small fraction of eligible are selected.

What to do

- **Don't overclaim.** If you can't do rigorous causal evaluation, don't claim you can.
- **Descriptive analysis is helpful.** Who gets the incentives (industry, size, wages, location), what percent of those eligible, how varies over time. What are explicit and implicit selection criteria.
- **Sensitivity simulations are helpful.** What would benefit/cost ratio for incentive be under different assumptions? What would incentive effects (e.g., cost per job or “but for”) have to be for incentive to have benefits greater than costs?
- **Incentives can be designed to be evaluable.** If explicit rules used to hand out incentives, then can compare with near-eligibles. In contrast, if incentive design allows great scope for subjective selection of “treatment group”, rigorous causal evaluation will always be challenging.

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Tax Expenditure Evaluations: Types and Questions to ask



Different approaches – Different questions

- **Descriptive Analysis**
 - Includes summary of how a credit works, information on which taxpayers claim the credit – perhaps by income level or industry or geography, may include some recommendations for changes
 - May use literature review and alternative scenarios to estimate effect
 - Can be performed relatively quickly with relatively fewer resources
- **Economic Impact Analysis**
 - Provides information on the value of the economic activity resulting from a tax incentive, such as employment or change in GDP
 - Often performed using IMPLAN or REMI model
 - Includes a return-on-investment (ROI) calculation
- **Econometric Analysis**
 - Attempts to differentiate between activity that is a direct result of the credit and that which would have occurred in the absence of the credit
 - Typically relies on econometric modelling to determine a causal relationship
 - Usually very data intensive and more time consuming to conduct
 - Often results are subject to some qualifications

Some Examples -

Descriptive Analysis (Least Resources)

- [Indiana Earned Income Tax Credit](#)
- [Evaluation of Pine Tree Development Zones in Maine](#)
- [Colorado Tax Expenditure Compilation Report, 2019](#)

Economic Impact Analysis

- [Nebraska Advantage Act](#)
- [Georgia Film Tax Credit Evaluation](#)

Econometric Analysis (Most Resources Required)

- [Historic Preservation Tax Credit in Iowa](#)
- [Beginning Farmer Tax Credit Program in Iowa](#)
- [Worth the Cost? An Examination of the Commercial Revitalization & Commercial Expansion Programs - NYC](#)

Other questions to consider -

- **Justification**
 - Why is this subsidy required?
 - How long is the subsidy needed?
 - How is it provided – credit, deduction, loan, grant?
- **Efficiency**
 - Does the tax incentive create unintended incentives in the economy or change taxpayer behavior?
 - Does it effect some taxpayers more than others or industries more than others?
- **Equity**
 - How are the benefits of the tax incentive distributed? Across income groups, different demographic groups or geographically
- **Opportunity Costs**
 - What is the likely impact of what the state would not be spending on when funding this tax incentive?

Other questions, cont'd.

- **Influence of outside incentives/factors**
 - Does the economic development project involve incentives from local or federal government?
 - What is the impact of the state tax structure on investment decisions?
- **Credit Structure and Administration**
 - Is credit designed in a manner that best supports its intended purpose?
 - Consider compliance costs of program – may influence who participates
- **Budgetary Risk**
 - Anticipate future costs of program
 - Analyze state liabilities of carry-forwards
 - Does increased use of the credit increase budgetary risk to the state
- **Local Government Impact**
 - What is revenue consequence of the policy across all jurisdictions?