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Comment on  
*The effects of tax incentives for  
small firms on employment levels*

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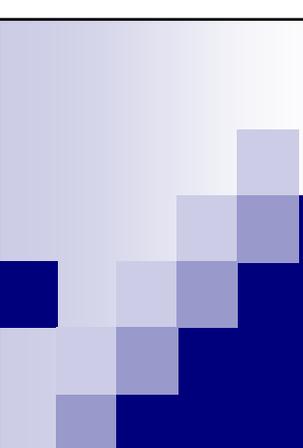
Impact Evaluation Network, 4<sup>th</sup> Annual Meeting  
University of Miami, October 9 2010.

The paper



## Overview

- This paper analyzes the effect of a tax simplification/reduction program in Brazil.
- Study the effect of tax incentives for small firms on *their own* employment levels.
- Exploit the discontinuity in firm revenue that defines eligibility to the program.
- Distinguishes the effect on firm size and on firm survival.



## The approach

## The approach

- The paper analyzes non experimental observational admin data.
- The identification strategy relies on economic theory:
  - To define the parameters and effects of interest.
  - To indicate estimation alternatives.
  - To reveal potential sources of bias.
- No need to be apologetic! These *are* conventional methods:
  - Obs. data most often than not has selection issues.
  - RCTs not always feasible, +scale up/equilibrium...

The data

## The data

- Other papers have analyzed some aspects of SIMPLES – the data source is one of the advantages here.
- Paper describes the sources+program, not the dataset. More details needed:
  - Descriptive statistics of outcomes-controls.
  - Panel structure: rotating one year panels? Can link 1997 to 1999?
  - Attrition vs mortality – this is a key aspect of the model/id strategy.
  - Average employment levels in the sample: from 27 to 37 in three years?

## The experiment

## The experiment

- Need a bit more on the institutional setting – the authors clearly know it quite well.
- Stated, intended and unintended effects:
  - Boost (formal) employment?
  - Boost formality – registration
  - Why employment? Profits?
- More on possibility of revenue manipulation-anticipation of tax change. Promised in intro...
- Inflation pushes firms above the threshold.
- “Opting” for the program – the threshold might be exogenous, but participation is not. “Non-compliers”? Anticipate higher future revenue...

The model

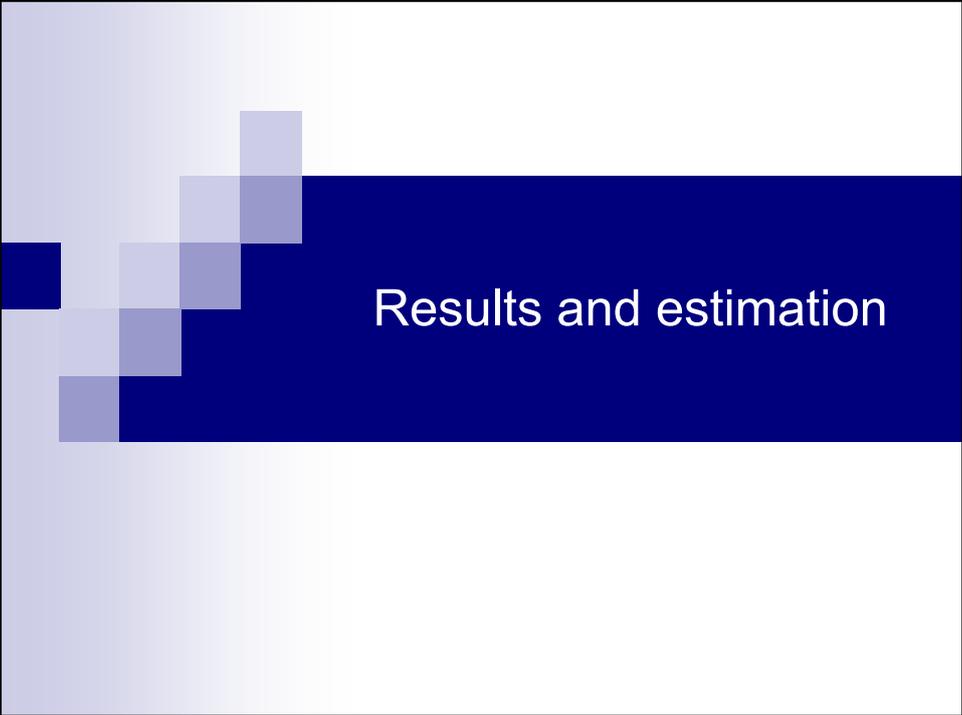
## The model

- The simple model could perhaps be streamlined. Careful with notation.
- Two tax levels:  $T^s$ ,  $T^{ns}$  – what about  $T=0$ ? Tax evasion – manipulation – audit...
- Important “selection” mechanism: effect on employment or on *registered* employment?
- Selection into the data sample.
- Galiani-Weinschelbaum (2007, CEDLAS DP 47):

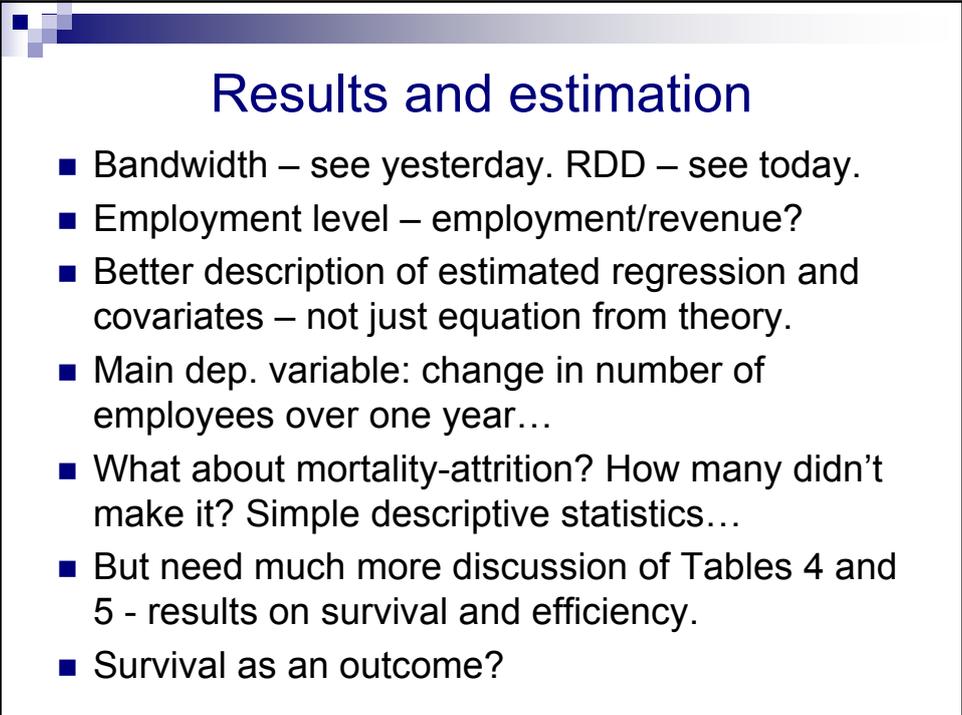
$$\begin{aligned}\Pi_f(a) &= Pf(a, l) - w_f l(1+t) - \tau \\ \Pi_i(a) &= (Pf(a, l) - w_i l)(1 - q)\end{aligned}$$

## The model

- The option is not only manipulating revenue to be above-below the SIMPLES threshold – it is also possible to manipulate *declared* revenue.
- No cheating? Non-registered workers in “formal” firms need to be paid from non declared funds.
- Modeling firms that have both formal and informal workers is not an easy task, but having a third  $T=0$  option might help.
- Perhaps connect a bit more with discussion- results in Fajnzylber (**P.!**) et al. and others.
- Firm size impact and aggregate productivity.

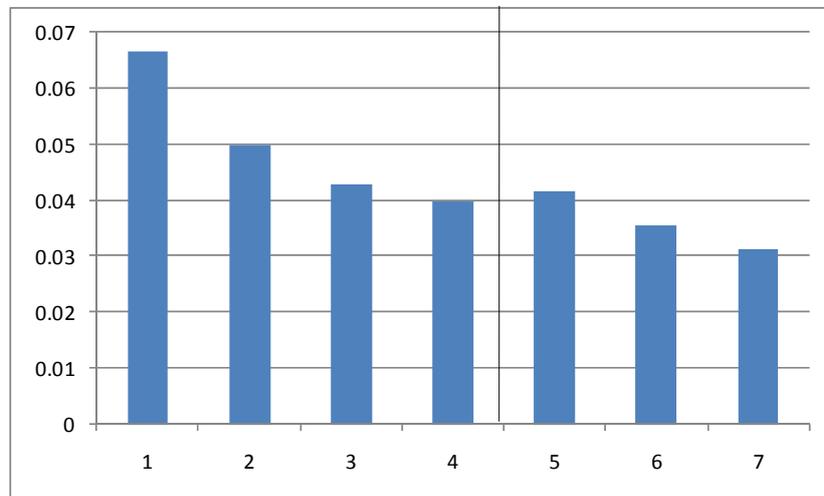


## Results and estimation



## Results and estimation

- Bandwidth – see yesterday. RDD – see today.
- Employment level – employment/revenue?
- Better description of estimated regression and covariates – not just equation from theory.
- Main dep. variable: change in number of employees over one year...
- What about mortality-attrition? How many didn't make it? Simple descriptive statistics...
- But need much more discussion of Tables 4 and 5 - results on survival and efficiency.
- Survival as an outcome?



## Related literature

- Connect to LAC applied literature on payroll tax reforms: Gruber, Kugler-Kugler, Cruces-Galiani-Kidyba.
- Other externalities of formality-registration: access to credit, etc.



## Sum up

- The paper is very open about selection problems.
- Could discuss more the threats to the identification strategy:
  - Choosing informality-under declaration of revenue
  - Manipulation of forcing variable
- Discuss why not – but also what if: size and direction of potential bias.