Discussion of
“Live or let die: formality, firm survival, and credit access in Colombia”

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Reform: Law 1429 of 2010

- Applies to firms that registered between 2011 and 2014
    - Only for firms with less than 50 employees

- Benefits decline over time
    - Lower registration and renewal cost for 3 years
        - 0% of the regular fee during first year
        - 50% during second year
        - 75% during third year
    - Reduced taxes for 5 years
        - 0% of the regular rate during first and second year
        - 25% during third year
        - 50% during fourth year
        - 75% during fifth year

Data and identification strategy

- PILA social security data
  - Monthly panel from Jul 2010 to Dec 2012
    - Jul 2010 to Dec 2010 = pre-treatment
    - Jan 2011 to Dec 2012 = post-treatment
  - City-firm size level
    - Small firms (11 to 50 employees) = treatment group
    - Medium firms (51 to 200 employees) = control group

Estimating equation

$$y_{cst} = \alpha + \beta PostTreat_{ct} + \theta Treat_{ct} + \gamma_c + \delta_t + \varepsilon_{cst},$$

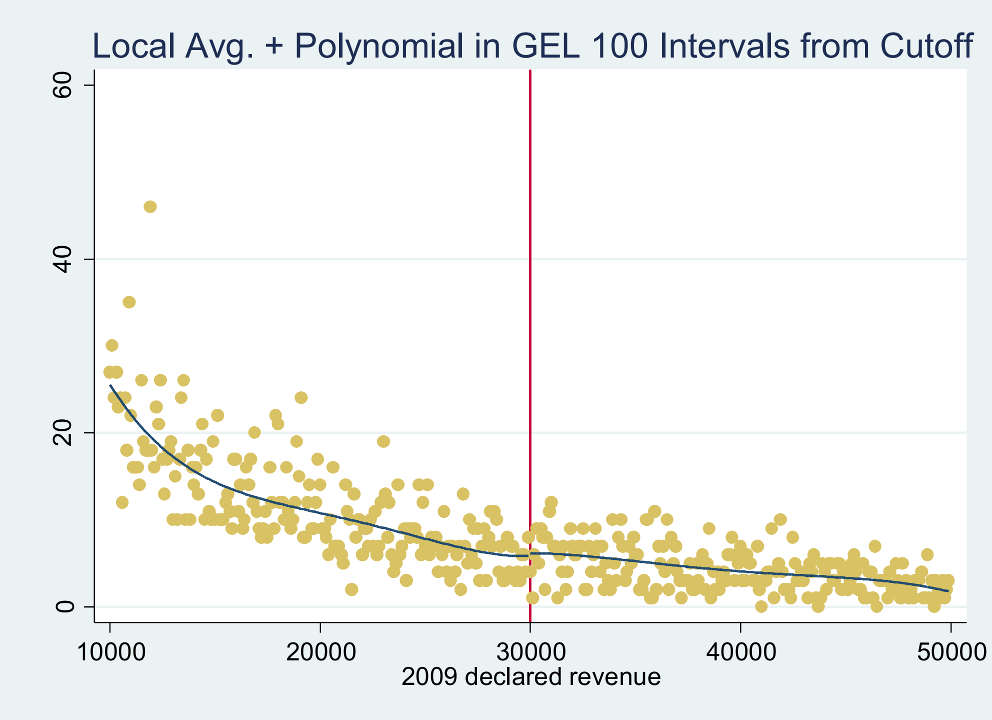
- c = city, s = size, t = time
- Should $PostTreat_{ct}$ be $PostTreat_{st}$ since it varies with size, not city?
- Should $Treat_{ct}$ be $Treat_{s}$?
- Cluster at size level, not at city-size level, since the reform does not vary at the city level?

Use difference-in-discontinuities?

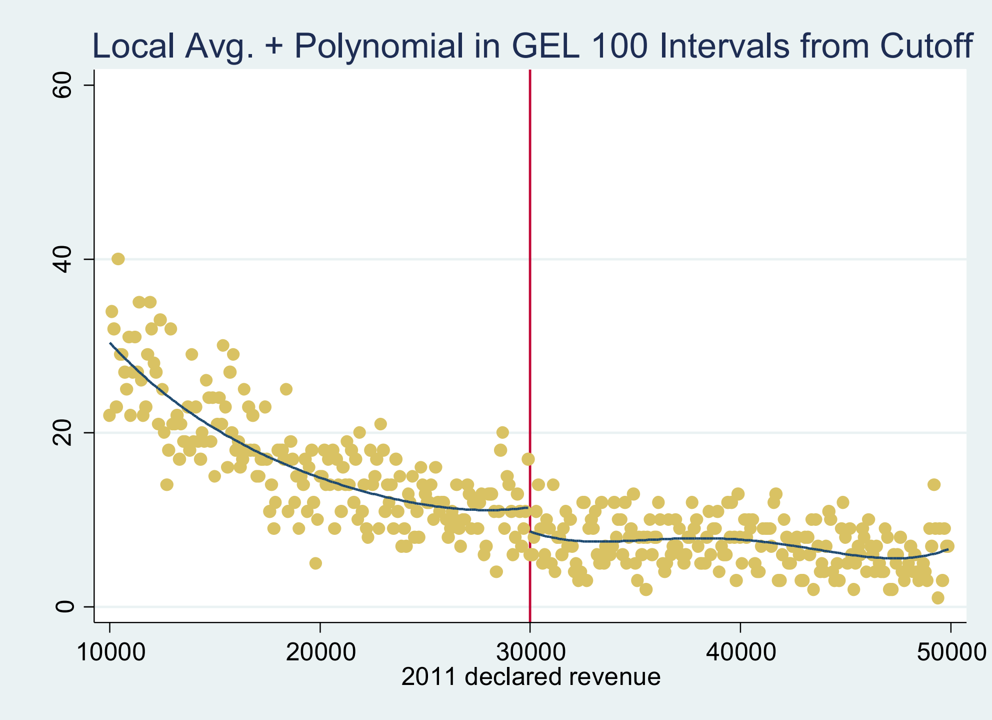
- Small vs. medium groups include a wide range of firms
- Focus on a small window around the 50-employee eligibility threshold
- Define narrow bins (1-2 employees)
- Run difference-in-discontinuities at the country level

Bruhn and Loeprick (2016): Georgia SME tax reform with eligibility based on revenue

Pre-reform RDD



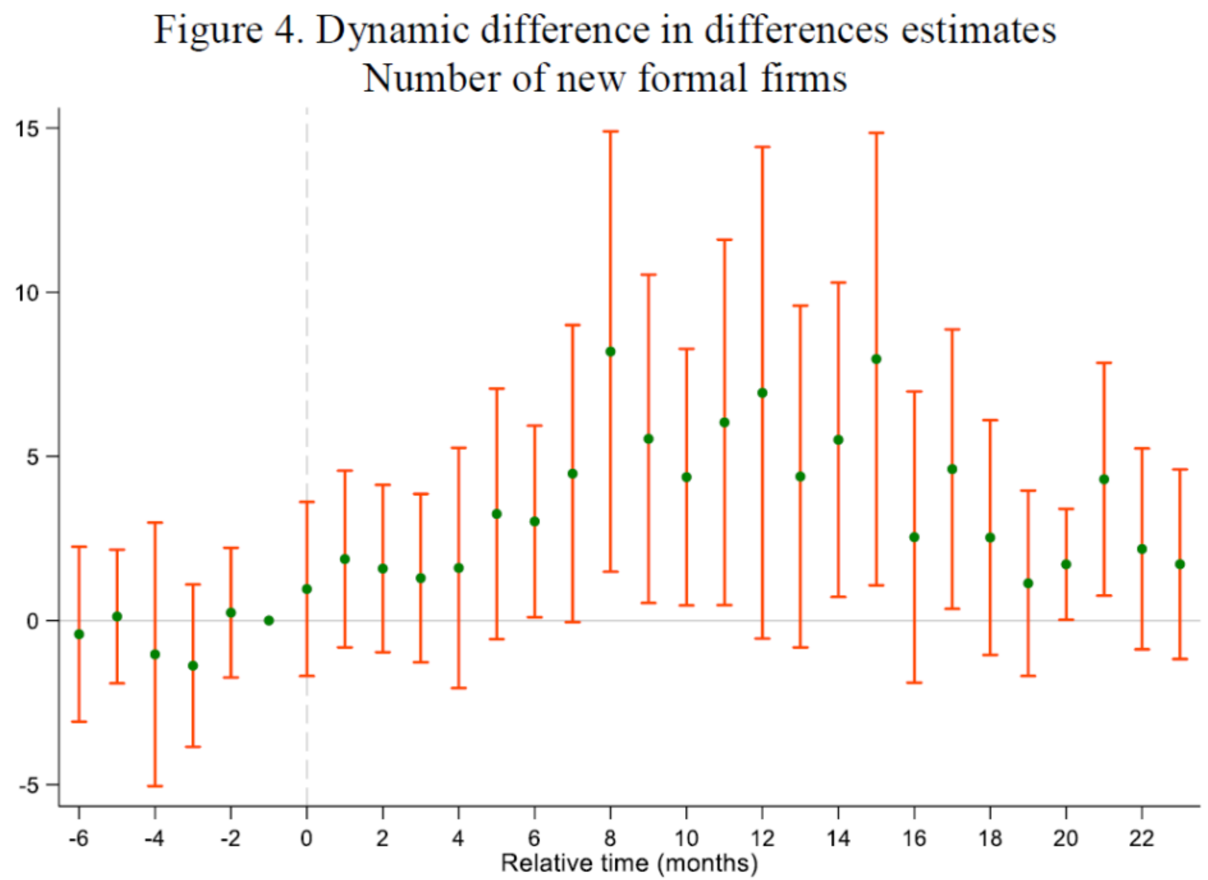
Post-reform RDD



0% tax rate below 30,000 → Increase in newly registered firms by 27% to 41%, depending in RDD window, in one year ONLY (registration of informal firms)

Effects of Colombian law over time

- Most new registration happens within 18 months of the new law
- Is the increase from informal firms vs. new firm creation?
- Firms register once, but don't renew their registration
    - Low benefits of registration?



Lower survival of newly registered firms

- Two potential channels
  - More competition from newly registered firms
  - Newly registered firms are marginal
    - Consistent with models of entrepreneurship with heterogenous ability
      - Branstetter et al. (2014); Bruhn (2011)
      - Higher ability firms already registered since they can pay higher costs
    - This conclusion can be expected, not “worrisome”

Marginal firms?

- Survival is defined as registration in PILA
  - Perhaps firms continue to operate but deregister/don’t report to PILA since the reform benefits decline over time

- Check if firms registered due to the reform have different
  - Wages
  - Education of the owner
  - Sex of the owner
  - Sector
  - Location