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

\[ y_{cst} = \alpha + \beta \text{PostTreat}_{ct} + \theta \text{Treat}_{ct} + \gamma_c + \delta_t + \varepsilon_{cst}, \]

• c = city, s = size, t = time
• Should PostTreat\textsubscript{ct} be PostTreat\textsubscript{st} since it varies with size, not city?
• Should Treat\textsubscript{ct} be Treat\textsubscript{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 heterogeneous 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