What is the Impact of Increased Business Competition?

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Overall Assessment

- Nice study
  - Important issues
  - Innovative way to collect data
  - Careful analysis
  - Plausible results/recommendations

- Also
  - Data strengths and limitations
  - Questions stemming from the analysis
Main Findings

- Structural reform that reduces entry costs for firms has an expansionary impact in the short run
  - Entry increases by 25%
  - Employment increases by 4%
  - 60% of employment increase comes from (mostly most productive) firms expanding size

- Firms’ response is heterogeneous in that standard models with constant elasticity of substitution are not consistent with the findings

- Show that a theoretical model with heterogeneous firms and variable markup accounts for the evidence
  - Most productive firms face a lower demand elasticity and increase employment in response to entry of new firms
Key Ideas

- Structural reforms aimed at increasing competition will presumably raise productivity and growth.

- But increased competition may increase costs (job destruction => q. of political feasibility).

- Limited empirical evidence; identification challenges:
  - Entry, hiring, investment,... -- endogenous
  - Difficulty of distinguishing effects of structural reforms and e.g., macro conditions

- => Examine this issue empirically and theoretically
Approach/Data

- 2005 reform in Portugal reduced entry costs for firms
- Reform was staggered across municipalities over time
- Questions examined empirically:
  - Did reform change firm entry and exit in short run?
  - How did changes in competition affect aggregate employment?
  - What micro mechanisms underlie the macro employment responses?
- Develop theoretical framework to confront empirical findings with models of heterogeneous firms in monopolistic competition
Econometric Methodology

- Reform implemented over years in various municipalities due to constraints on office space and trained public administrators

- Use dynamic difference-in-differences strategy

- Compare evolution of firms entry, exit and employment across municipalities before and after opening of office
Concern that reform municipalities were chosen for reform based on past or expected economic performance
- If so, could not identify the effect of reform

=> check the plausibility of assumption that municipalities did not have different trends in entry, exit and employment before reform

Invoke “parallel-trend assumption” as identification assumption
Econometric Methodology (3)

- In most regressions, unit of analysis is a municipality (not firm) in a given year

- => estimate average effects of reform as coefficients on municipality dummy variables after the reform, controlling for various factors
For employment, also aggregate data to municipal level separately for firms of different age and size

Examine adjustment on intensive and extensive margin

Analyze exit of firms on basis of firm-level data
Analysis – Issues

- Truly major reform – important phenomenon
- Population of limited liability firms – great dataset
- Question of adequacy of parallel trend assumption and evidence
  - Municipalities not selected at random – most populated municipalities and municipalities with “physical availability” chosen earlier
  - There may be unobserved characteristics that affect post-reform performance of firms in selected municipalities
Analysis – Issues (2)

Possible alternative/additional approaches to handling identification (selection of municipalities for reform)

- Find instruments for selection of municipalities for reform
- Use propensity score matching of municipalities before reform
- Handle anticipation effects/Ashenfelter dip in DID approach by randomly allocating a placebo reform year among the non-reformed municipalities (mimic the time intensity of actual reforms among the non-reform municipalities)
- Control for both absolute time (calendar year) and relative time (time before/after event of reform, true or placebo)
Analysis – Issues (3)

- Have firm-level information at 5-digit level – mostly not exploited in analysis

- Aggregation of firm-level data to municipality level => much available information not used in analysis
  - Rationale – avoid bias because exiting firms are on average smaller than surviving ones => aggregate to solve problem
  - Would be useful to analyze surviving firms

- Use sales per employee as a proxy for labor productivity (control for other inputs; use TFP?)
Overall Assessment

- Very good paper
- Important topic
- New type of data
- Related to literatures on structural reforms, firm dynamics, entrepreneurship
- Careful econometric work
- Plausible interpretations of observed outcomes
- Nice theoretical model to explain the observed patterns