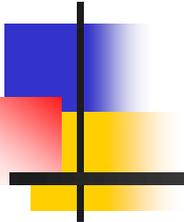


# What is the Impact of Increased Business Competition?



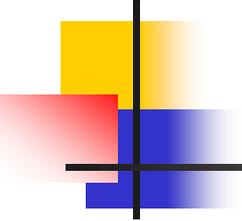
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Chiara Maggi and Sonia Felix

Discussion by Jan Svejnar

EIB

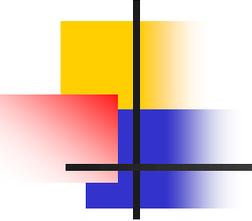
*March 2019*



# Overall Assessment

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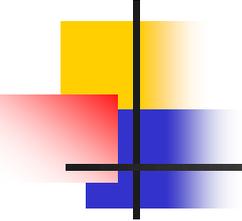
- Nice study
  - Important issues
  - Innovative way to collect data
  - Careful analysis
  - Plausible results/recommendations
- Also
  - Data strengths and limitations
  - Questions stemming from the analysis



# Main Findings

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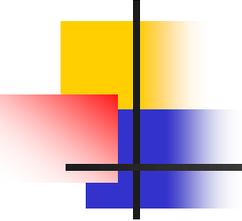
- Structural reform that reduces entry costs for firms has an expansionary impact in the short run
  - Entry increases by 25%
  - Employment increases by 4%
  - 60% of employment increase comes from (mostly most productive) firms expanding size
- Firms' response is heterogeneous in that standard models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

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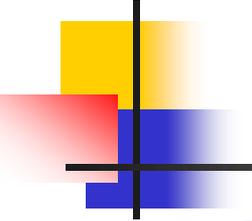
- Structural reforms aimed at increasing competition will presumably raise productivity and growth
- But increased competition may increase costs (job destruction => q. of political feasibility)
- Limited empirical evidence; identification challenges
  - Entry, hiring, investment,... -- endogenous
  - Difficulty of distinguishing effects of structural reforms and e.g., macro conditions
- => Examine this issue empirically and theoretically



# Approach/Data

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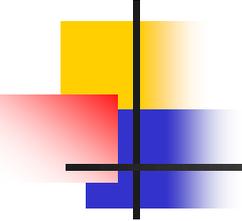
- 2005 reform in Portugal reduced entry costs for firms
- Reform was staggered across municipalities over time
- Questions examined empirically:
  - Did reform change firm entry and exit in short run?
  - How did changes in competition affect aggregate employment?
  - What micro mechanisms underlie the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



# Econometric Methodology

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- 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



## Econometric Methodology (2)

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- 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)

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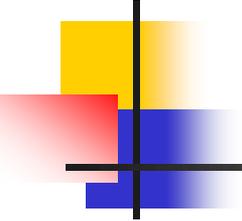
- In most regressions, unit of analysis is a municipality (not firm) in a given year
- => estimate average effects of reform as coefficients on municipality dummy variables after the reform, controlling for various factors



## Econometric Methodology (4)

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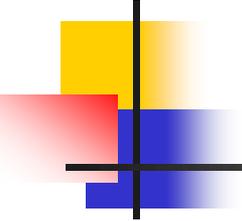
- For employment, also aggregate data to municipal level separately for firms of different age and size
- Examine adjustment on intensive and extensive margin
- Analyze exit of firms on basis of firm-level data



# Analysis – Issues

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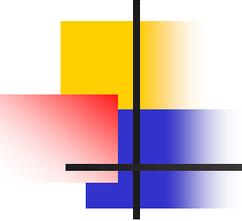
- Truly major reform – important phenomenon
- Population of limited liability firms – great dataset
- Question of adequacy of parallel trend assumption and evidence
  - Municipalities not selected at random – most populated municipalities and municipalities with “physical availability” chosen earlier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



## Analysis – Issues (2)

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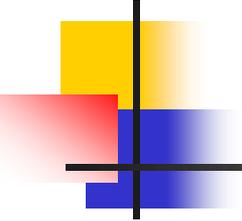
- Possible alternative/additional approaches to handling identification (selection of municipalities for reform)
  - Find instruments for selection of municipalities for reform
  - Use propensity score matching of municipalities before reform
  - Handle anticipation effects/Ashenfelter dip in DID approach 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)

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- 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

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- 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