

Discussion of
"Who do unions target? Unionization over the
life-cycle of U.S. businesses"
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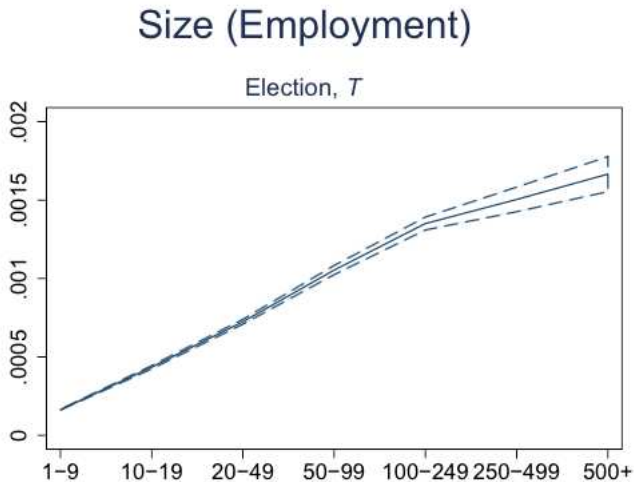
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Summary

- Two parts to the paper
 - ▶ New empirical facts from merging NLRB Union Election Data with Census Bureau Data
 - ▶ Provide a model to understand these facts
- This discussion
 - ▶ Summary of the facts
 - ▶ Focus on the model

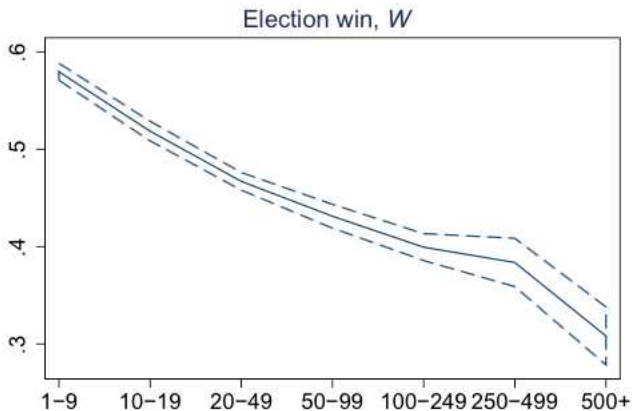
Empirical Fact 1 _____

Fact 1: More productive firms (as proxied by size) are more likely to be targeted for an election



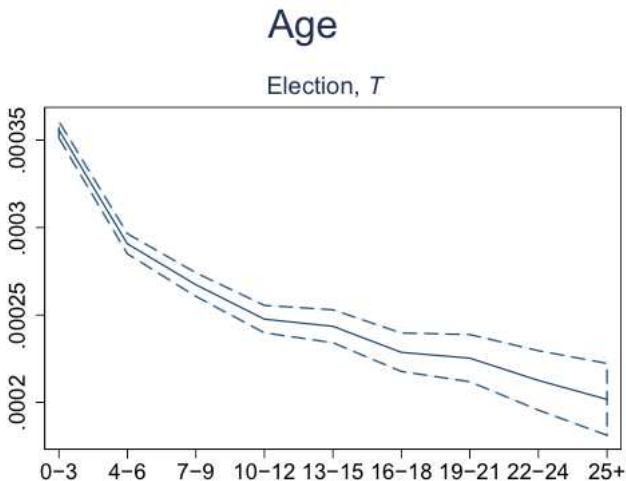
Empirical Fact 2 _____

Fact 2: Conditional on being targeted, union is more likely to lose the vote in productive firms (as proxied by size)



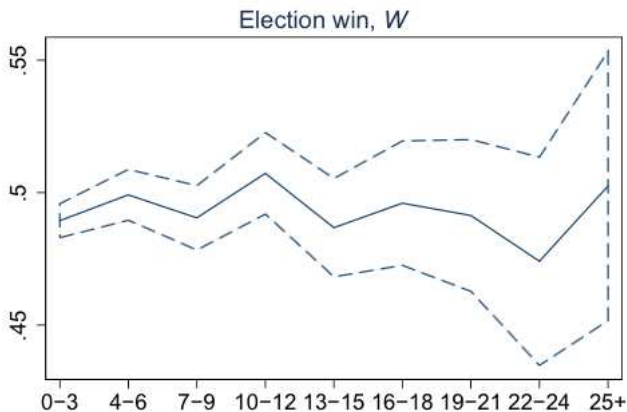
Empirical Fact 3 _____

Fact 3: Young firms are more likely to be targeted for an election



Empirical Fact 4 _____

Fact 4: Conditional on being targeted, age does not influence the outcome of the vote



Theory

Simple theory to explain these facts:

- 1 A firm's long-run productivity χ is learned progressively by observing the productivity of a firm of age a :

$$x_a = \chi + \epsilon_a$$

- 2 Targeting a firm for an election requires payment of fixed cost c , independent of firm's characteristics
- 3 The union wins the election with probability $\omega_a \sim \text{iid } \Gamma([0, 1])$
 - ▶ ω_a is known *before* the targeting decision is made
- 4 The benefit of a union firm to the union is $B(x_a)$ each period
 - ▶ B is strictly increasing and *strictly convex*

Theory _____

Matching theory to data:

- ① Targeting a firm costs constant c but the benefit of unionization increases with productivity x
 - ▶ Unions target more productive firms (**Fact 1**)
 - ▶ Unions target productive firms even if probability of success is low (**Fact 2**)
- ② Benefit of unionization is strictly convex in productivity x so that unions like uncertainty
 - ▶ Unions target young firms (large uncertainty about long-run productivity) (**Fact 3**)
 - ▶ This is where the learning mechanism matters

Theory _____

The theory is very simple and goes a long way in explaining the data

Comments:

- ① The theory works *qualitatively*, what about *quantitatively*?
 - ▶ At a first order, the theory struggles with **Fact 4** (age does not influence the outcome of the vote)
 - ▶ Second order effect (the uncertainty of the econometrician about the union's beliefs) might help
 - ▶ Quantitative analysis would be useful
- ② The correlation between probability of being targeted and age could come from other mechanisms
 - ▶ Alternative 1: young entrepreneurs might be unexperienced and unable to prevent unionization
 - ▶ Alternative 2: because of adjustment costs young productive firms are not large enough to prevent unionization
 - ▶ Can the data differentiates between the theories?
 - Learning relies on convexity of B (returns to scale)
 - Look at difference across industries?

Theory _____

Possible extensions:

- 1 Modeling the life cycle of the firm
 - ▶ With adjustment costs: productivity ~~×~~ size
 - ▶ Benefits of unionization B could also depend on age
- 2 The econometrician is assumed to not know the union's beliefs about productivity
 - ▶ But the panel contains all previous productivities!

Conclusion ---

- Combining datasets yields interesting empirical findings
- Simple theory goes a long way in qualitatively explaining the data