Discussion of:

Do Larger Firms Exert More Market Power? Markups and Markdowns along the Size Distribution

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Summary of the Paper

- Wage markdowns can account for measurement errors in computing output price markup using the production function approach.
- After corrections, findings indicate:
  - Decreasing firm markups with firm size.
  - Increasing wage markdowns with firm size.
- When controlling for markdowns, a positive correlation emerges between markups and size.

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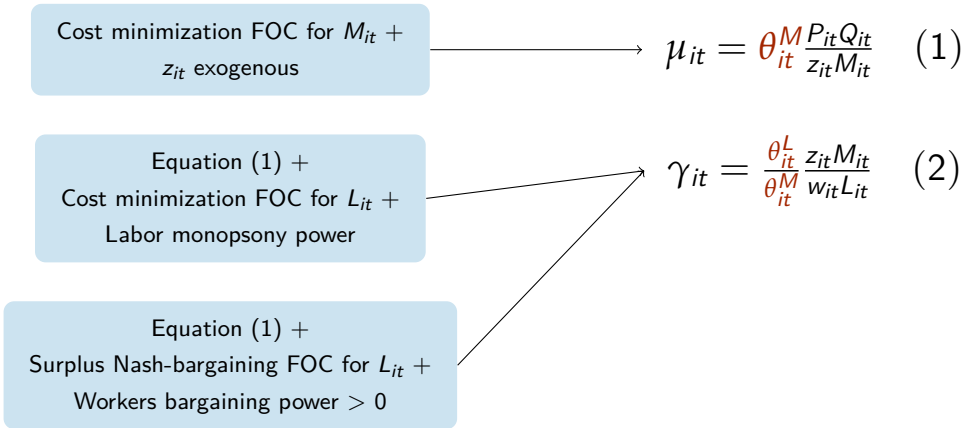
- When controlling for markdowns, a positive correlation emerges between markups and size.
- **Insight:** Labor market power offers an alternative reason to labor-augmenting productivity on puzzling findings in Raval 2023.

Main Equations



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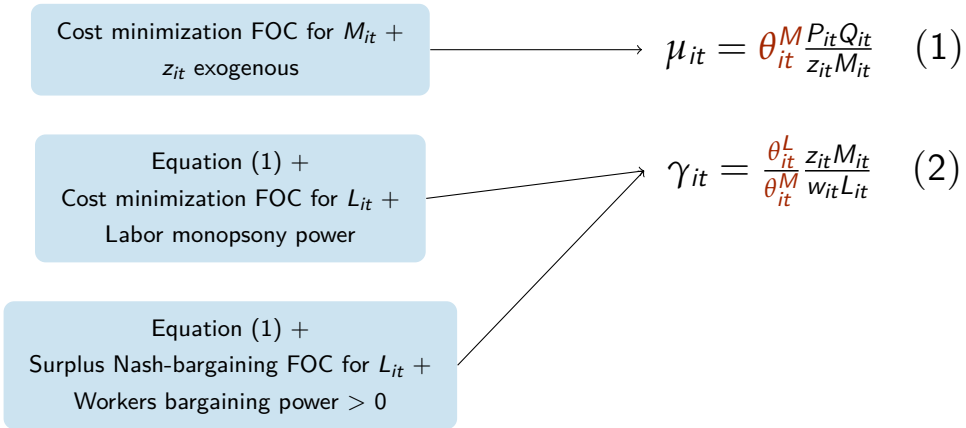

Bottom line: Output elasticities for M and L must be estimated.

Estimating Output Elasticities

$$q_{it} = f(K_{it}, L_{it}, M_{it}, \boldsymbol{\beta}) + \underbrace{h_{it}(\omega_{it-1}, \boldsymbol{T}_{it-1}) + \xi_{it}}_{\omega_{it}} + \varepsilon_{it} \tag{1}$$

M_{it} allocation responds to ω_{it} while L_{it} does not.

Is the markdown characterization still valid given these conditions?

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Estimation issues:

- From product to firm-level output quantity data $\Longrightarrow$ Aggregate price index
- Unobserved K and M input prices $\Longrightarrow$ Control function
- Controlling for unobserved productivity

Scalar Unobservable for Vector Unobservable?

- Control function approach using energy and raw materials demand.

$$e_{it} = e_{it}(\omega_{it}, K_{it}, L_{it}, EX_{it}, NumProd_{it}, w_{it}) \tag{2}$$

- e_{it} is a component of M_{it}.

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$$e_{it} = e_{it}(\omega_{it}, K_{it}, L_{it}, EX_{it}, NumProd_{it}, w_{it}) \tag{2}$$

- e_{it} is a component of M_{it}.
- From your main equations, M_{it} is a function of μ_{it} and γ_{it}.
- Why shouldn't be also e_{it}?

Scalar Unobservable for Vector Unobservable?

- Assuming that the policy function for e_{it} is

$$e_{it} = e_{it}(\omega_{it}, K_{it}, L_{it}, EX_{it}, NumProd_{it}, w_{it}, \mu_{it}, \gamma_{it}) \tag{3}$$

- And assuming the following control function for productivity

$$\omega_{it} = g_{it}(e_{it}, K_{it}, L_{it}, EX_{it}, NumProd_{it}, w_{it}) \tag{4}$$

- Past and present markups and markdowns residual heterogeneity is introduced into the structural error term.

- This would invalidate the moment conditions.

Conclusion

- More discussion on why one should think there is no residual input and output market power heterogeneity affecting e_{it}.

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- Demirer 2020 also has material demand conditionally independent of markups.
- He implicitly assumes compatible conduct, for example, Cournot or monopolistic competition.
- Can you make a similar case?