Discussion "The Effects of Horizontal Merger Synergies on Competitors, Customers, and Suppliers" by Gennaro Bernile and Evgeny Lyandres

Discussant: Andres Liberman (NYU)

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Summary of the paper

- This paper estimates the effects of forecasted synergies of mergers of firms that sell the same product on the valuation of competitors, customers, and suppliers
  - Paper develops a model of oligopolistic competition that includes synergies
  - Paper tests predictions using a novel approach
- Higher forecasted synergies lead to
  - lower returns and op. performance of competitors
  - higher returns and op. performance of customers
  - ambiguous results for competitors' customers (introduce switching costs)
  - ambigous results for suppliers and suppliers of rivals (introduce switching costs)

My take on the contribution

- Previous literature has found that horizontal mergers lead to:
  - Lower value of competitors of merging firms, and
  - small economic effect (and not statistically significant) on customers and suppliers.
  - Measures of market power uncorrelated with value of competitors, rivals, or suppliers
- In general, this rejects hypothesis that first order effect of horizontal mergers is to reduce competition (e.g. Stigler 1964)

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  - small economic effect (and not statistically significant) on customers and suppliers.
  - Measures of market power uncorrelated with value of competitors, rivals, or suppliers
- In general, this rejects hypothesis that first order effect of horizontal mergers is to reduce competition (e.g. Stigler 1964)
- This paper: heterogeneity is important!
  - Try to disentangle market power hyopthesis from forecasted value creation
  - Mergers that are forecasted to produce synergies will cause different effects than those that are not

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- But so did Farrell and Shapiro (AER 1990): "*We analyze horizontal mergers in Cournot oligopoly. We find general conditions under which such mergers raise price, and show that any merger not creating synergies raises price. We develop a procedure for analyzing the effect of a merger on rivals and consumers and thus provide sufficient conditions for profitable mergers to raise welfare.*"

First: model

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  - Is it two types of synergies, with different effects? (only for suppliers, which is fine)
- OK. So start from:

$$q_i = K_i^{\alpha} I_i^{\frac{1}{2}}$$

so "α is a convenient measure of production efficiencies obtained by joining capital"

- Also, unit cost of I_i is:

$$C\left(I_i, K_i\right) = \frac{c}{K_i^{\beta}}$$

to "enable modeling the cost savings due to consolidation"

Cost function

- Then,

$$C(q_i) = \frac{q_i^2 c}{K_i^{2\alpha+\beta}}$$

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$$C(q_i) = \frac{q_i^2 c}{K_i^{2\alpha+\beta}}$$

- Paper defines α as operating synergies and β as cost savings
- Comment: α and β are limited by technology, fixed at the industry level; not merger-specific synergies

What are synergies? (2)

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- How to model this?

- Variation in α and or β? I don't know how allowing variation in α and/or β across firms affects the model's simplicity and predictions
- What is α_{merged} relative to each α_i? Same with β_{merged}?

Second comment: interpretation of results

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- What does it mean to measure the effects of (forecasted) synergies?
- Consider the following thought experiment:
  - Suppose you have two identical mergers (!) between two identical firms, merger 1 and merger 2
  - Randomly assign (!) merger 1 forecasted synergies equal to 10% of combined costs, and merger 2 with forecasted synergies equal to 20% of combined costs
- How does value/profits/operating performance of firms/suppliers/customers vary for merger 2 relative to merger 1?

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- In particular, what does it mean when we say "forecasted synergies are higher for firm X than for firm Y"?
- Forecasted synergies do not occur in a vacuum: someone must estimate and implement them
- Very importantly, they affect probability of merger
  - Would merger between X and Y would have occured had forecasted synergies been any lower? What is the appropriate counterfactual?

Interpretation

- A plausible alternative: mergers in which competitors will be hurt and in which customers will benefit are those that report the highest forecasted synergies
  - How else does the merger generate value? (tax motive seems to be unimportant, e.g. Houston, James, and Ryngaert (2001))

Interpretation

- A plausible alternative: mergers in which competitors will be hurt and in which customers will benefit are those that report the highest forecasted synergies
  - How else does the merger generate value? (tax motive seems to be unimportant, e.g. Houston, James, and Ryngaert (2001))
- Perhaps more interesting: what do we learn about deals where forecasted synergies were too high/too low relative to ex post performance (if at all possible to measure)? I think this is close to Bauguess and Bernile (2011) though..., but:
  - Is this telling us something about the quality of management?
  - Is the market able to price this in? Is the market fooled?
  - How do competitors react? How do suppliers react?

Conclusion

- An interesting idea that allows us to learn something about the social value of mergers
- I suggest you define synergies in your theory section so we can match to empirical application
- I would examine the very interesting evidence you present in light of alternative interpretations, accounting for the fact that forecasted synergies are endogenous to all merging outcomes (and taking Bauguess and Bernile (2011) into account)
    - Perhaps this allows us to learn some interesting economic fact about managers or how synergies are estimated and reported to the market

Thanks

Thank you!

Other comments

- Eq (3), should $C(I_i, K_i) = \frac{c}{K_i^{\beta}}$ instead?