Merger Analysis

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January 2021

HORIZONTAL MERGER ANALYSIS

Retrospective Merger Analysis

The Idea: look at actual prices etc. before and after a merger

- clearly interesting, but faces challenges
- few if any natural experiments
  - data only for approved mergers
  - even *proposal* of merger dependent on market unobservables (e.g., anticipated profits) and antitrust policy
- endogeneity/selection biases
  - direction unknown
  - not easily fixed: one needs model of merger proposal and merger approval, and exclusion restrictions to provide exogenous variation
- useless for competition authority evaluating a *proposed* merger.

Prospective Merger Analysis

Natural idea for IO economist:

- estimate model of supply and demand (e.g., BLP) on pre-merger data
- counterfactual simulation: holding parameters fixed
  - change ownership structure in the model to reflect merger
  - simulate new equilibrium outcomes (e.g., prices)
  - yields predicted impacts on prices, welfare
  - can include any expected "efficiencies" in same framework
- no central role of "market definition" (demand estimates reveal which goods are close substitutes)

A limitation: would need more to address "coordinated effects," investment incentives, upstream bargaining power,. . . .

Example 1: Nevo (2000)

RTE Cereals

- estimates BLP demand model
- uses price-setting FOC to infer markups (marginal costs)
- changes ownership structure and simulate new equilibrium
  - for actual merger
  - for hypothetical mergers
- asks what cost efficiency would be sufficient to result in zero net effect on prices
- compares predictions to ex post price data as “sanity check” (remarkably close).

Example 2: Fan (2013)

U.S. Newspaper markets (1990-2000s)

- similar broad idea, but several important twists
- two-sided market: selling to consumers and advertisers
- endogenous prices and product quality (need more IV)
- nice illustration/variation on a type of Waldfogel IV: demographics of “neighbors” or even "neighbors of neighbors" that alter equilibrium markups)
- simulations of actual and hypothetical mergers: non-price impacts can be as important as price impacts.

Example 3: AT&T-DIRECTV (2015)

Merger review in practice:

- merger reviewed by both DOJ and FTC ecnomomists
- parties offering both Internet (AT&T) and TV (DTV in all markets, AT&T in some)
  - bundle discounts by cable→AT&T Internet and DTV are complements
  - so potentially pro- and anti-competitive effects
- merger simulation* on behalf of merging firms
  - simple BLP demand (nested logit: internet, tv, bundle)
  - results→mix of price effects, but net of higher consumer welfare
  - analysis validated by agency experts.

*public version linked on Steve Berry's web page.