Merger Simulation Research:
Knowns and Unknowns

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- Offer a discussion of some issues in the research of merger simulation and merger retrospectives

Outline

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- Focus is on research and not policy

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- Hope to set up some of the discussion in the following panel

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- Why do an ex-post study?
  - to learn about the actual effect of merger
  - to generate a prediction of the likely effect of future mergers (the measurement exercise becomes a model)
  - to test models of merger simulation
- Issues in the analysis:

- A merger retrospective is a measurement exercise of evaluating the e¤ects of a consummated merger ex-post.
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    - to generate a prediction of the likely e¤ect of future mergers (the measurement exercise becomes a model)
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How Well Does Merger Simulation Perform?

- Most of the evidence is for the narrow de...nition
- Overall results mixed
- Example the acquisition of Chex by GM
  - simulation (Nevo. 2000)
  - retrospective (Ashenfelter and Hosken, 2008)
- On average, merger simulation gets the right answer
  - simulation: 2% price increase for major involved brands (Chex, Cheerios, Wheaties)
  - retrospective: 3% increase for these brands

- However, patterns across brands do not match well
- Chex prices:
  - simulation: predicted to have a large increase (12% w/o cost savings)
  -

What can explain the differences?

- Problems with the simulation
  - demand estimates
  - price setting model
  - other factors: cost reductions, promotional activities, new products, etc.

- Problems with the retrospective
  - control group
  - event window
  - data measurement problems

- Think of what we need to rationalize numbers: (very!) large costs savings and mis-measured cross price elastictities (what about other brands, say Kellogg?)

- Examines merger simulation of airline mergers in the 1980s.
- Finds that the merger simulations fail to predict accurately price changes in several of the mergers.
- Explores the sources of the errors in the simulations (changes in product o¤erings, shifts in demand, or changes in behavior).

Are merger simulations hopeless?

- What is the alternative? How do alternative approaches perform
  - evidence from Peters (2006)
- Everyone likes to complain about demand estimation
  - little evidence to support this claim
  - reminds me a bit of the joke about the drunk looking for the keys under the light ...
  - merger retrospective are a very bad/ine¢cient way to test demand models
  - some recent ...eld experiments.
- In most cases we need to continue to rely on simulation (in the wider sense) so we need to improve our models

Future direction for research

- Demand estimation:
  - dynamics
  - better more ‡exible models
  - IVs: weak and invalid

- Supply model:
  - non-price e¤ects
  - dynamics
  - coordinated e¤ects

- Policy issues:
  - uncertainty