Discussion on
Regulation, Enforcement & Competition:
Evidence from Spanish Local TV

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Overview of the Paper

- Regulation or deregulation affects market structure
- The degree to which regulations are enforced is not fully observable in many contexts
- Goal of this paper: use observed market structure to infer the degree of enforcement
- Empirical approach
  - Observe market structure in 3 different regimes - with no regulation, regulation and partially enforced regulation.
  - Estimate Bresnahan/Reiss style entry models in these regimes, and compare estimated breakeven market size for various market configurations across these regimes.
Outline of the Model

$N$th entrant’s profits:

$$\Pi^N = V^N \times S - F^N$$

Variable profits  
Market size  
Fixed Cost

$$\Pi^N = (\bar{V}^N + \eta) \times S - (\bar{F}^N + \xi)$$

$$= \bar{V}^N \times S - \bar{F}^N + \varepsilon$$

$$= \bar{\Pi}^N + \varepsilon$$

With homogenous firms, a market with $n$ firms implies

$$\Pi^n \geq 0, \Pi^{n+1} < 0$$

Assuming common (across firms) $\varepsilon \sim N(0,1)$ this is an ordered Probit model.
Entry thresholds

\[ \Pi^N = \bar{V}^N \times S - \bar{F}^N + \varepsilon \]

N\textsuperscript{th} entrant's profits:

\begin{align*}
\hat{S}^n &= \frac{F^n}{V^n} \\
\text{Breakeven market size (for average firm with } \varepsilon = 0 \text{) to be the } n\text{th entrant}
\end{align*}

Data for 3 years: 1995 (no regulation), 1999 (regulated but not fully enforced) 2001 (deregulated)

Empirical strategy: 1. Estimate models separately for 1995, 1998 and 2001 2. Compare \( \hat{S}^n, F^n \) and \( V^n \) for the three time periods 3. Infer differences as resulting from regulation/enforcement
Main Results

- Breakeven market sizes for 2001 (partially enforced regulation) resemble those for 1995 (no regulation) but different from 1998 (regulation)
- Fixed costs for 1998 and 2001 different from 1995 (1998 and 2001 somewhat similar to each other)
- Variable profits different for 2001 (1995 and 1998 somewhat similar to each other)
Comments

• Interesting question
  • Most empirical work takes the regulation as given, but does not investigate the degree of enforcement

• Interesting data
  • Multiple regimes within a relatively short time period
  • Regime shifts (at least the one in 2001) caused by `exogenous’ shocks (election outcomes)

• Issues
  • Inferring changes in entry thresholds across years as reflective of regulation/enforcement
  • changes in market structure due to development of overall
Comments

• Issues
  • Inferring changes in entry thresholds across years as reflective of regulation/enforcement
    • changes in market structure due to development of overall market - national/regional channels, cable/satellite channels
    • changes in macroeconomic environment
Comments

• Issues (continued)

• Theoretical relationship between regulation and fixed cost/variable profit ratios?

• Variable profits in 2001 were higher

• Deregulation could lead to lower costs

• But also potentially intensified competition for advertisers, lowering revenues

• Since entry threshold is ratio of fixed costs & variable profits, the absence of theoretical relationship carries over to it as well
To summarize

- Interesting results on how entry thresholds, fixed costs and variable profits changed across the years
- However, hard to infer these changes as resulting solely from regulation/enforcement
- In the absence of theoretical relationship between regulation and entry thresholds, hard to make inferences about regulation & degree of enforcement
Suggestions

- Include observable variation across years, to enhance credibility of the conclusions on the effect of regulation
  - Presence/viewership information on other channels
  - Local economic variables, if any?
- Could exploit the information about election results?
  - Election outcome is used as a shifter for fixed costs
  - Different regimes across markets within a year
  - Direct comparisons of markets with right-wing and left-wing Governments would not be valid
- Given sufficient data, RDD or matching estimators may be feasible