

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

$$\begin{aligned}\Pi^N &= (\bar{V}^N + \eta) \times S - (\bar{F}^N + \xi) \\ &= \bar{V}^N \times S - \bar{F}^N + \varepsilon \\ &= \bar{\Pi}^N + \varepsilon\end{aligned}$$

With homogenous firms a market with n firms implies

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

Assuming common (across firms) $\varepsilon \underset{iid}{\sim} N(0, 1)$ this is an ordered Probit model.

$$\Pi = V \times S - F + \varepsilon$$

Entry thresholds

Nth entrant's profits: $\Pi^N = \bar{V}^N \times S - \bar{F}^N + \varepsilon$

Breakeven market size (for average firm with $\varepsilon = 0$) to be the n^{th} entrant

$$\hat{S}^n = \frac{F^n}{V^n}$$

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