Competition with exclusive contracts and market-share discounts

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Research project

- *Competition with exclusive contracts and market-share discounts*
- *Exclusive contracts and market dominance*
- *Hybrid monopolistic screening*
- Linear pricing (with P. Zanchettin)
- Bundling

Framework

- Two or more firms are active in an industry and compete by supplying substitute products
- All firms can use exclusive or market-share contracts

Contracts

- Non-linear pricing
  - Firm i offers a price schedule $P_i(q_i)$ in which q_i is the quantity firm i is willing to supply and $P_i(q_i)$ is the corresponding total payment it asks
- Exclusive contracts
  - Firm i offers two price schedules, ${P^E}_i(q_i)$ and ${P^{NE}}_i(q_i)$. The former applies to exclusive contracts ($q_j = 0$), the latter to non exclusive ones ($q_j > 0$)
- Market-share contracts
  - Firm i offers a price schedule $P_i(q_i, q_j)$

"Exclusive contracts and market dominance", Calzolari & Denicolò

Asymmetric information

- With complete information and non-linear pricing, firms can extract the buyers' surplus fully
  - exclusive contracts and market-share contracts are redundant [O'Brien and Shaffer (JEMS, 1997) and Bernheim and Whinston (JPE 1998)]
  - equilibrium is efficient
    - if exclusion is efficient, no exclusive dealing in equilibrium

Asymmetric information

- With asymmetric information, buyers obtain information rents
- Firms have an incentive to use exclusive (or market-share) contracts to better extract those rents

Main effects

- When exclusive contracts are banned, firms compete for each marginal unit of a buyer’s demand
- With exclusive contracts, firms compete for the entire volume demanded by a buyer (competition for exclusives, or in “utility space”)

Procompetitive effect

- Competition for marginal units is softened by product differentiation, competition in utility space is not
- This effect is strongest in a symmetric duopoly
- Symmetric firms are perfectly homogeneous in utility space and so competition is fierce

Procompetitive effect

- Firms can coordinate their pricing strategies to some extent
  - Starting from a “Bertrand equilibrium” in utility space, they can coordinate their non-exclusive pricing so as to extract the buyers’ preference for variety
  - This implies that exclusive contracts are not accepted in equilibrium, which makes room for raising also exclusive prices to some extent
- However, even in the “most cooperative” equilibrium exclusive contracts reduce prices and profits

Anticompetitive effect

- In competing for exclusives, the dominant firm can leverage on the information rents that it must leave on inframarginal units
- This reduces competitive pressure from rivals
- In the competition for marginal units, this effect does not arise

Anticompetitive effect

- This effect is strongest when firms are asymmetric
  - Competitive fringe model
- The dominant firm may then use exclusive contracts without having to compensate buyers
- The dominant firm can increase both its market share and its prices
- Buyers are harmed (both in terms of higher prices and reduced variety) and so are competitors

Dominance

- Dominance is benign by itself
- It arises because the dominant firm enjoys a competitive advantage vis-à-vis its rival
- This may be a cost advantage or a quality advantage

Policy implications

- Exclusive contracts may be pro-competitive when the dominant firm's competitive advantage is small, so that competitors can effectively compete for exclusives
- Exclusive contracts tend to be anti-competitive when the dominant firm's competitive advantage is large
  - size of competitive advantage may be inferred from market shares

Applicability

- Two or more firms already active in the market
- Only the dominant firm's exclusive contracts are accepted in equilibrium
- Contracts need not be long term
- Amount of the market foreclosed need not be large
- Economies of scale irrelevant
  - the mechanism is not based on raising rivals' cost

Market-share contracts

- With symmetric firms, radically different from exclusive contracts
  - Market-share contracts are anti-competitive, exclusive contracts tend to be pro-competitive
- With asymmetric firms, they are similar and (if feasible) may be used as part of the same strategy for different realisations of demand

As efficient competitor

- The analysis suggests that the as-efficient-competitor approach may be fundamentally flawed

Thank you!