

Inefficient Buyer Mergers To Obtain Size Discounts

Bedre, Ozlem and Stéphane Caprice

Discussion by

Thibaud Vergé (CREST-LEI)

Workshop "Market Power in Vertically Related Markets"
Toulouse - March 16, 2009

- **Recent UK Competition Commission Supermarket Inquiry.** Comments made by Convenience Stores :
 - *Tesco* (the leader) continues to buy many stores and to open smaller stores located closer to the consumers (*Tesco Express*).
 - It thus obtains a better deal from the producers (size discounts), but the producers then increase the price charged to the smaller retailers (such as independent convenience stores).
 - Prices increase and some convenience stores exit.
- **Inderst and Valletti (2008).**
 - Convex upstream costs.
 - Linear tariffs (double marginalization)
 - Take-it-or-leave offers made by the producer, but (costly) alternative supply source.

- Non linear tariffs (*actually “point tariffs”*).
- Bilateral bargaining.
- No alternative supply source.

▶ The results

- **No waterbed effect.**
- **But still size discount (if upstream costs are convex).**
- **To the detriment of the producer not of rival retailers or consumers.**

Negotiation between the producer and one retailer

Joint-Profit when R owns only store i in market j

$$\Pi_{i,j}(q_{i,j}) = P_j(q_{i,j} + J_{-i}^*) q_{i,j} - cq_{i,j} - C(q_{i,j} + Q_{-(i,j)}^*) + \sum_{(k,l) \neq (i,j)} T_{k,l}^*$$

Joint-Profit when R owns stores $i - j$ and $i' - j'$

$$\begin{aligned} \Pi(q_{i,j}, q_{i',j'}) &= P_j(q_{i,j} + J_{-i}^*) q_{i,j} - cq_{i,j} + P_{j'}(q_{i',j'} + J_{-i'}^*) q_{i',j'} - cq_{i',j'} \\ &\quad - C(q_{i,j} + q_{i',j'} + Q_{-[(i,j),(i',j')]}^*) + \sum_{(k,l) \neq [(i,j),(i',j')]} T_{k,l}^* \end{aligned}$$

► No Waterbed Effect

- First-order conditions are identical in both cases.
- Owning stores in different markets does not affect the equilibrium quantities.

Surplus generated by a successful negotiation

Joint-Profit when R owns only store i in market j

$$S_{i,j} = P_j(J^*) q_{i,j}^* - cq_{i,j}^* - C(Q^*) + C(Q^* - q_{i,j}^*)$$

Joint-Profit when R owns stores $i - j$ and $i' - j'$

$$\begin{aligned} S_{((i,j),(i',j'))} &= P_j(J^*) q_{i,j}^* - cq_{i,j}^* + P_{j'}(J'^*) q_{i',j'}^* - cq_{i',j'}^* \\ &\quad - C(Q^*) + C(Q^* - q_{i,j}^* - q_{i',j'}^*) \\ &= S_{i,j} + S_{i',j'} \\ &\quad + C(Q^* - q_{i,j}^* - q_{i',j'}^*) + C(Q^*) - C(Q^* - q_{i,j}^*) - C(Q^* - q_{i',j'}^*) \end{aligned}$$

► Size Discount

Size discount (a bigger retailer pays less for the same quantity), but only if upstream costs are strictly convex.)

- **Inefficient Buyer Mergers might be Profitable**

- Retailing marginal cost increases reducing the retailer's profit.
- But this is compensated by the size discount.
- These mergers reduce consumer surplus.

- **Comments :**

- Why should the retailer fully merge (rather than simply setting up a joint-purchasing unit) if it knows that retailing cost will increase?
Uncertain efficiency gains (see Choné and Linnemer (*IJIO*, 2008)) ?
- Why can't independent stores set-up a similar joint-purchasing unit (“buying groups”) to benefit from size discounts ?

- **Incentives to Merge Retail Competition.**

With non-linear retailing costs

Joint-Profit when R owns only store i in market j

$$\Pi_{i,j}(q_{i,j}) = P_j(q_{i,j} + J_{-i}^*) q_{i,j} - \Gamma(q_{i,j}) - C(q_{i,j} + Q_{-(i,j)}^*) + \sum_{(k,l) \neq (i,j)} T_{k,l}^*$$

Joint-Profit when R owns stores $i - j$ and $i' - j'$

$$\begin{aligned} \Pi(q_{i,j}, q_{i',j'}) = & P_j(q_{i,j} + J_{-i}^*) q_{i,j} + P_{j'}(q_{i',j'} + J_{-i'}^*) q_{i',j'} - \Gamma(q_{i,j}, q_{i',j'}) \\ & - C(q_{i,j} + q_{i',j'} + Q_{-[(i,j),(i',j')]}^*) + \sum_{(k,l) \neq [(i,j),(i',j')]} T_{k,l}^* \end{aligned}$$

► Waterbed Effect ?

- First-order conditions are no longer identical.
- Owning stores in different markets affects the equilibrium quantities.
- Waterbed effects ?