Tomra, abuse and rebates

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A Few Facts: Tomra (from F. Maier-Rigaud and D Vaigauskaite: Prokent/ Tomra, a Textbook case? Abuse of dominance under perfect information. *Competition Policy Newsletter* 2006 No 2)

- **Tomra used**
  - **exclusivity agreements,**
  - **individualized quantity commitments, and**
  - **individualized, retroactive rebate schemes;**

- **Claim: Agreements**
  - **restricted/delayed/ foreclosed entry of competitors,**
  - **even eliminating competitors from the market => consumer harm.**

Facts (cont'd): Exclusivity Agreements (1998 – 2002)

- **Tomra had a dominant position in the market; fringe suppliers were weak**

- **Payments to downstream users included**
  - **discounts on purchases and**
  - **other rewards such as free machines or free upgrades for the installed machines.**

- **Quantity Commitments:**
  - **Min quantities s.t. if agreed to, then customers received better prices.**

Impact: Questions

- **What would Tomra wish to gift any rents to retailers through ED? Are retailers in scarce supply?**
- **Competitive question: what is the impact of these practices on price and surplus for the users and for consumers?**
- **That is, if there is competition for the field, what is the impact of this competition on allocative efficiency?**

ED Game (General)

- **At first stage firm decides whether it wishes to play an ED/Rebates (ED) game.**
- **At second stage, if ED is selected, prices and other conditions are set.**
- **Non-ED competition game has to be specified.**
- **Firm (e.g. Tomra) compares pay-off with and without ED and maximizes**

ED Game (cont'd)

- **ED (Tomra): match the best offer from rival(s).**
- **If rivals are less efficient or rival's product is an inferior substitute, then ED can be profit enhancing against non-ED outcome.**
- **Payments to the retailer can be non-margin sensitive payments (fixed payments) or margin sensitive (lower prices or quantity sensitive rebates or free machines or…).**

ED Game (cont'd)

- **Lower input costs for recycle bins reduce costs of retailers using these machines.**
- **If retail markets are competitive, cost savings can be competed away and lead to lower prices to consumers.**
- **From perspective of retailers using machines, the trade-off is reduced product choice for lower wholesale prices and other payments.**
- **Example: Two firms, asymmetric in demand; ED offers include lower wholesale prices; demand is elastic.**

Private and Social Incentive for ED: Competition in Wholesale Prices

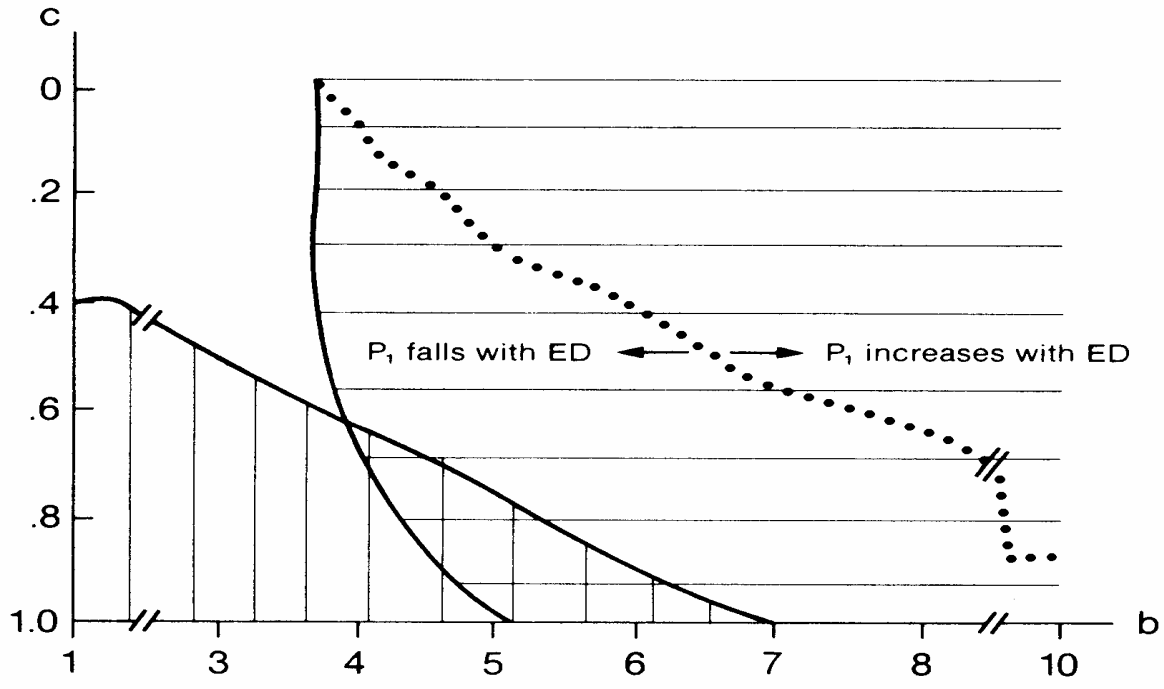


FIGURE 2. PRIVATE AND SOCIAL INCENTIVES FOR ED. HORIZONTAL LINES INDICATE THE REGION WHERE π_1 INCREASES WITH ED, A PRIVATE INCENTIVE FOR ED; VERTICAL LINES INDICATE THE REGION WHERE SURPLUS INCREASES WITH ED, A SOCIAL INCENTIVE. PARAMETERS b AND c ARE BOUNDED APPROPRIATELY (SEE TEXT)

ED Competition (Previous paper w/ Ralph Winter)

- **Vertical axis reflects product substitutability;**
- **Horizontal axis reflects product dominance;**

- **Prices may fall w/ ED; Prices must fall if surplus is to increase.**

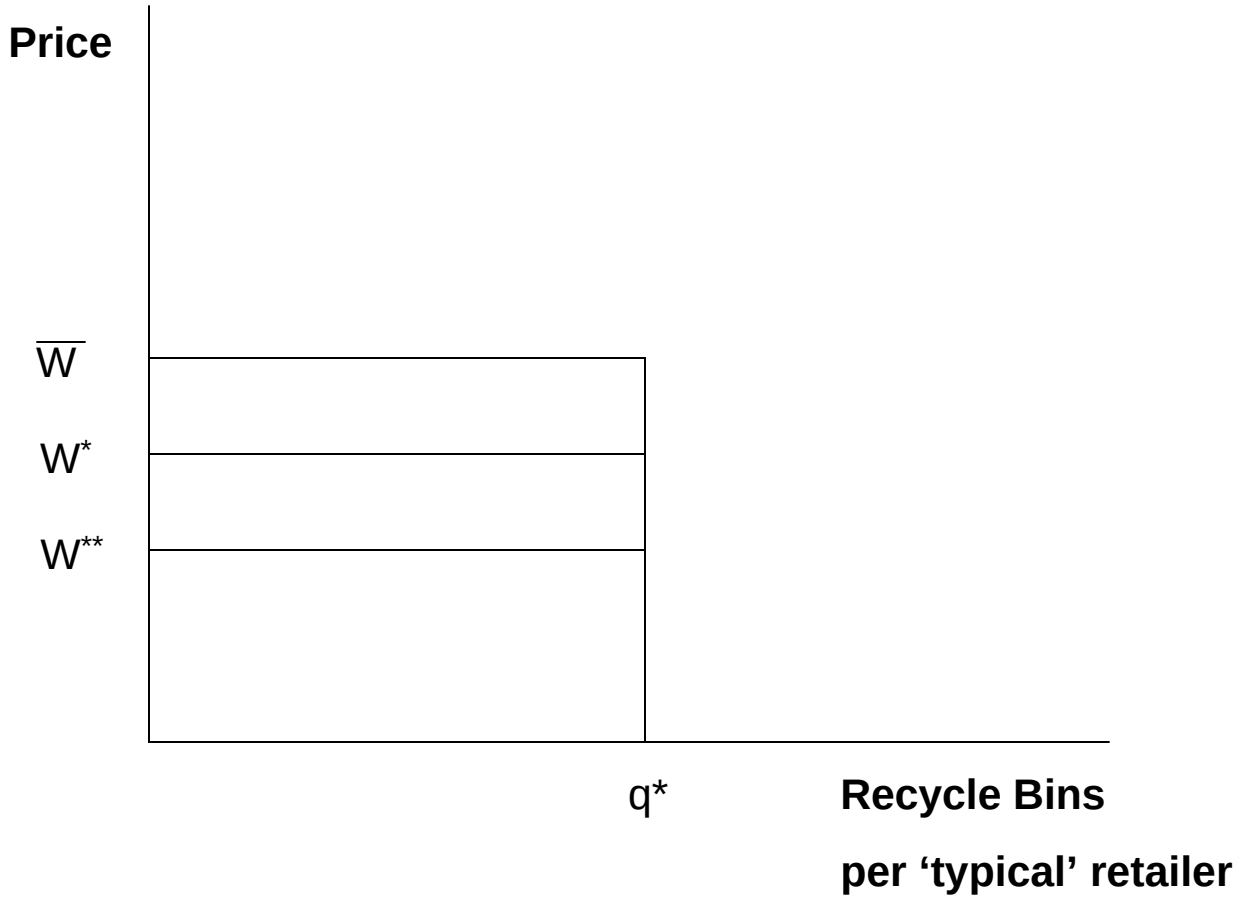
- **Exists a region where price could fall, ED enhances profits and surplus is enhanced.**

Efficient Transfer Price

- **What if wholesale price set at efficient transfer price (marginal cost) other instruments (non-margin sensitive) used to transfer rents?**
- **Model of Bernheim and Whinston *(JPE*, February 1998, Vol 106 (1))**
  - **issue is which coalitions of upstream (bin provider)/downstream firms (retailers) realize maximum profits**

Price elasticity: Tomra

- **Price for recycle bins is an input price for the retailer;**
- **Price may be inelastic up to some limit where it doesn’t pay to stock whatever needs to be recycled.**
- **Wholesale price (of recycle bins and ancillary items) is then a ‘lumpy’ instrument to distribute rents.**


Price
$\overline{W}$
W*
W**
q*
Recycle Bins
per 'typical' retailer

$\overline{w}$

Price Inelastic

- **Horizontal axis is recycle bins per typical retailer; vertical axis is wholesale price; retailers are alike.**

- **For wholesale prices above $\overline{w}$, the retailer would not stock the product that required recycling and not use the bin**

- **Without ED, wholesale price would be w^*; with ED wholesale price *could* be $w^{**} < w^*$.**

Price Inelastic (cont'd)

- **With inelastic demand,**
  - **lowering wholesale price lowers input cost**
  - **with benefits to consumers if lower retailer costs are competed away**
  - **but does not alter the # of bins and so it neutral on this front for resource allocation**

- **If retailers are *not* alike (distribution of $\overline{w}$'s), lowering wholesale price may induce some retailers to carry the corresponding products w/ recycle bins and expand consumer choice.**

Some evidence: Beer Distribution in NZ 1881 – 1906 (Second stage of ED game)

- **NZ Parliament passes legislation to allow local provinces to control licensed public houses (lph);**
- **Some provinces exercise choice (Auckland:331 lph in 1881;266 in 1911); others do not (Nelson: 187 in 1881; 183 in 1911)**
- **Prediction: where (i) provinces significantly lower lph and (ii) brewers not alike, more efficient or dominant brewers compete for lph through ED.**
- **In NZ ED could include altering the wholesale price of beer (margin) and payments to lph to improve premises (non-margin distorting).**

NZ Beer (cont'd)

- **Data: 7 provinces for 7 time periods or 49 observations;**

- **Estimate** $P = \alpha_0 + \alpha_1 IP + \alpha_2 OPHNE + \alpha_3 OPHE + \alpha_4 FNE + \alpha_5 FE$

- **Where *P* is an index of the wholesale price of beer; *IP* is an index of the inputs to brewing; *OPHNE* is output per brewer in non-ED provinces; *OPHE* is output per brewer in ED provinces; *FNE* is the number of brewers in non-ED provinces; and *FE* is the number of brewers in ED provinces.**

Results

Variable	Coeff Est	‘t’ Statistic
Constant	72.11	6.38
IP	.22	3.62
OPHNE	-.55	-1.12
OPHE	-.90	-1.13
FNE	.39	1.08
FE	.53	1.70
Adj R^2	.35	

Results (cont'd)

- **Input prices are significant for explaining wholesale price changes w/ predicted sign**
- **As output per firm increases (in both ED and non-ED regions), wholesale prices fall (variable is not significant);**
- **As number of brewers in ED provinces fall, wholesale price decreases; result holds for non-ED provinces but not significant.**

Some Readings

- **American Bar Association, (2006) "Buying Loyalty Revisited: Loyalty Programs in the US, EU and Canada," ABA: Chicago.**
- **B. Douglas Bernheim and Michael D. Whinston (1998) "Exclusive Dealing," *Journal of Political Economy* 106 (1): 64 103.**
- **Giulio Federico (2005) "When are Rebates Exclusionary," *European Commission Law Review* Vol 9.**
- **Patrick Greenlee and David Reitman, (2006) "Competing with Loyalty Discounts," US DOJ.**
- **Frank Maier-Rigaud and Dovile Vaigauskaite (2006) "Proket/Tomra, a textbook case? Abuse of dominance under perfect information," *Competition Policy Newsletter*, No. 2.**
- **David Spector (2005), "Loyalty Rebates: An Assessment of Competition Concerns and a Proposed Rule of Reason," CPREMAP DP 0514.**