MARKET-SHARE DISCOUNTS AND INCENTIVES IN A VERTICALLY RELATED INDUSTRY

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- A vertically integrated industry: upstream level firms trade intermediate good with downstream level firms.
- Vertical restrictions refer to certain types of conditions of the resale of products: for example, resale price maintenance, exclusive dealing, exclusive territory, franchise, different discounts schemes.
- Market Share Discounts are discounts that a manufacturer offers its distributors/retailers if their sales of the manufacturer’s brand comprise a sufficiently high percentage of their total sales of a given class of goods.

Why studying of vertical restriction is important?

- Antitrust regulators should recognize pro-competitive and anticompetitive effects of vertical restriction.
- Pro-competitive effects: decreasing transaction costs, reaching an optimal level of production, eliminating double price marginalization etc.
- Anticompetitive effects: exclusion of competitors from a market, creating barriers for enters of new firms to a market etc.

Recent considerations of MSD practices in trial courts

- *LePage's Inc. v. 3M*;
- *Virgin Atlantic Airways Ltd. v. British Airways* ;
- *Concord Boat Corp. v. Brunswick Corp.*:
- Brunswick market share was 75% in 1983. Brunswick offered market share discounts: an agreement to buy 80% of engine requirements from Brunswick might result in a 3% discount, agreement for 70% a 2% discount, and an agreement for 60% a 1% discount. Other boat builders sued Brunswick alleging that these discount programs excluded competing firms from the market and amounted to monopolization.

Literature

- In the antitrust low literature Tom, Balto, Averitt (2000), Foer (2000) addressed the following questions:
  - How should antitrust law assess the competitive implications of MSD?
  - Does the law of exclusive dealing prevent antitrust from reaching these agreements?

- Marx and Shaffer (2004) consider MSD in a three party sequential contracting environment; Mills (2004) consider MSD use as incentives mechanism under assumption that effort level is contactable.

The basic model assumptions

- At the upstream level there are an brand manufacturer and competitive sector firms which produce substitute goods.
- There is the only downstream distributor which can make a costly effort to increase a demand for the brand-good (e.g. it can be costly promotional action).
- The level of effort is not observable by the manufacturer.
- All upstream level firms compete in prices;
- If MSD is allowed the brand manufacturer can set a menu of prices and a market share thresholds instead of wholesale price.

More formally:

- The Distributor profit-maximizing problem is:

$$\boldsymbol{p}^{D} = (A(e) - q_1 - bq_2 - t)q_1 + (1 - q_2 - bq_1)q_2 - eE \rightarrow \max_{e=\{0,1\}, q_1, q_2 \geq 0}$$

where, e is the effort level that affects the consumers demand for the good of the manufacturer, A(1) > A (0), t is the manufacturer price, E is the cost of the effort.

- The brand manufacturer's profit maximization problem is:

$$\boldsymbol{p}^{M} = q_1 t \rightarrow \max_{t}$$

where t is either a wholesale price or a menu of prices in the form:

$$t = \begin{cases} t_L & if\ q1/(q1+q2) \geq s, \quad s \in [0,1] \\ t_H & otherwise \end{cases}$$

The characteristic of outcome for the particular case

A(1) = A(0), no room for the effort

- The downstream firm profit decreases
- Total industry profit decreases
- Social welfare decreases
- The share of competitive sector firms decreases although they are not leave market completely.

- The manufacturer's profit increases

- => **MSD have anti-competitive character**

The characteristic of an outcome for a case A(1) > A(0)

- The downstream firm profit decreases
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- Total industry profit increases
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- => **MSD have pro-competitive character**

The intuition

- The downstream takes the effort only if the quantities of the good 1 is high enough.
- In order to make this quantities to be high enough the upstream firm may set wholesale price to be small enough.
- The gain of the upstream firm from increasing in the demand for its good is smaller then the losses from the price reduction.
- MSD are a way to enforce the downstream firm to sell more good 1. Thus the MSD use increases the quantities of good 1 up to the level when the effort is profitable for the downstream firm.
- This effort increases the demand for the good 1 and as a sequence increases both the upstream firm profit and consumer surplus.

The main conclusion

- judgment on either the MSD has the anti- or pro-competitive effect crucially depends on features of market environment.
- While the MSD may serve for a redistribution of the profit between the upstream and the downstream firms and may lead to decreasing in social welfare
- it may also be efficient instrument for incentives creation.
- In turn, this may increase the welfare.
- Thus the MSD should not be treated as the anticompetitive practices *a piori*, but rather has to be judged on a case-by-case basis

Literature (mentioned)

- Tom, W.K., D.A. Balto, and N.W. Averitt, 2000, "Anti-competitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing", Antitrust Law Journal, 67, 615-640.
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