MANUFACTURERS AND RETAILERS:
USE OF VERTICAL RESTRAINTS

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Manufacturers often use “vertical restraints” in dealing with retailers:

- Resale price maintenance
- Exclusive dealing
- Exclusive territories
- Full-line forcing

Contractual provisions used to affect behavior of retailers

Historically treated as “per se” illegal under US antitrust rules, but now presumed legal

Argument in favor of vertical restraints: intense competition between retailers may result in inefficient service and excessive quality differentiation
Double-Marginalization

A principal (manufacturer) seeks contract to maximize its profits, given agent (retailer) takes actions to maximize their profits given terms of contract

Problem of overcoming “vertical externalities” between stages of marketing chain

Best illustrated where unit of good sold at wholesale is same as unit of good sold at retail:

- Manufacturer and retailer are vertically integrated, retail demand being $D^R$ and marginal revenue $MR^R$ (see Figure 1)

- Profit-maximization where $MR^R$ equals marginal internal transfer cost of $C^W$

- Retail price $P^V$, output $X^V$, and total profits $(B+C)$
Figure 1: Double Marginalization

\[ P = MR \]

\[ P^V = P^W \]

\[ D^W = MR^R \]

\[ X^U \]

\[ X^V \]
Double-Marginalization

- In non-integrated market structure, manufacturer offers contract where wholesale price is $P^w$

- Follows from maximizing its profits where $MR^w$ equals marginal wholesale costs $C^w$, with output of $X^U$, and profits (B)

- Given contract, retailer maximizes profits where $MR^R$ equals $P^w$, with retail price $P^U$, output of $X^U$ with retail profits (A)

- Problem of *double marginalization* results in prices $P^U>P^V$, output $X^U<X^V$, and profits $(A+B)<(B+C)$

- Vertical externality resolved through *two-part tariffs* or *resale price maintenance* (RPM)
Two-Part Tariffs and RPM

- If manufacturer sets wholesale price equal to $C^W$, and *franchise fee* of $(B+C)$, i.e., retailer is induced to set vertically integrated retail price $P^V$ and output $X^V$

- Profits of vertical chain are maximized, consumers are better off, and retailer is *residual claimant* of any additional profits

- Alternatively, RPM can be used, retail price fixed at $P^V$ and wholesale price set at $P^W$, i.e., retailer earns no profit, manufacturer getting $(B+C)$

- Both types of vertical restraint enhance economic efficiency

- Exclusive dealing could *facilitate collusion* at either one or both stages of marketing chain

- Anti-trust authorities should treat vertical restraints on case-by-case basis
Exclusive Dealing

- Suppose each manufacturer delegates single retailer to sell its product, i.e., *exclusive dealing*

- Manufacturers/retailers compete in price in order to maximize their respective profits, given choice of price by other manufacturer/retailer (Bertrand competition)

- Suppose each manufacturer initially sets wholesale price equal to its marginal cost, franchise fee being set to zero

- Neither retailer can raise price as they will be undercut by their competition

- Initial equilibrium, at e (Figure 2) where \( R_1 \) and \( R_2 \) are initial reaction functions for retailers (each reaction function traces out profit maximizing price of retailer, given price of other retailer)

- Setting wholesale price equal to marginal cost does not maximize vertical profits due to competitive pricing by retailers
Figure 2: Retailing Duopoly
Exclusive Dealing

Suppose manufacturer 1 increases wholesale price above marginal cost – it has exclusive dealing arrangement with retailer 1

Increase in wholesale price for retailer 1 shifts their reaction function to \( R_1' \) – equilibrium at \( e^* \), where each retailer credibly raises price

Retailer 1’s profits increase, which are appropriated by manufacturer 1 through a franchise fee

Manufacturer 2 also raises wholesale price, retailer 2’s reaction function shifting to \( R_2' \), new equilibrium at \( e' \), prices rising to \( P_1' \) and \( P_2' \)

Both retailers use franchise fees to appropriate higher profits in final equilibrium

Exclusive dealing along with franchise fees reduces competition at both levels of marketing chain, making consumers worse off
Slotting Allowances

- What happens if retailers have bargaining power?

- Estimates for US suggest negative franchise fees received by supermarket chains – slotting allowances – rose from $1 billion in 1990s to $18 billion by 2015 (The Economist, 2015)

- Kroger and Safeway both use such fees, Walmart does not – although it gets other retail payments

- Slotting allowance: fee paid by food manufacturer to place its product on supermarket shelf

- What is logic of such fees?
  - Signal new products will succeed
  - Allocate scarce shelf-space
  - Reduce inter-store competition
Slotting Allowances

- Competitive food manufacturing sector sells products to retailing duopoly differentiated by location, services etc.

- In absence of franchise fees:
  - Manufacturers cannot raise wholesale price above marginal cost
  - Neither retailer can raise retail price

- With franchise fees, manufacturer can credibly raise wholesale price and offer negative franchise fee, i.e., slotting allowance

- Food retailer, pays higher wholesale price, recouping lost revenue through slotting allowance

- In paying higher wholesale price, competition reduced at retail, other retailer raising price

- Same result as exclusive dealing, except retailers grab profits from less competition at retail
Slotting Allowances and Anti-Trust


Smaller food manufacturers complain slotting allowances put them at competitive disadvantage compared to larger firms that can afford to pay them

Argument is they result in vertical foreclosure – i.e., manufacturer denied access to downstream retailer

FTC’s recent review of guidelines for Robinson-Patman Act* (2015) simply required manufacturers to offer same allowance to all retailers

*1936 statute originally designed to prevent manufacturers using wholesale price discrimination in dealing with chain stores compared to smaller retail stores