AE 503

MANUFACTURERS AND RETAILERS:

USE OF VERTICAL RESTRAINTS

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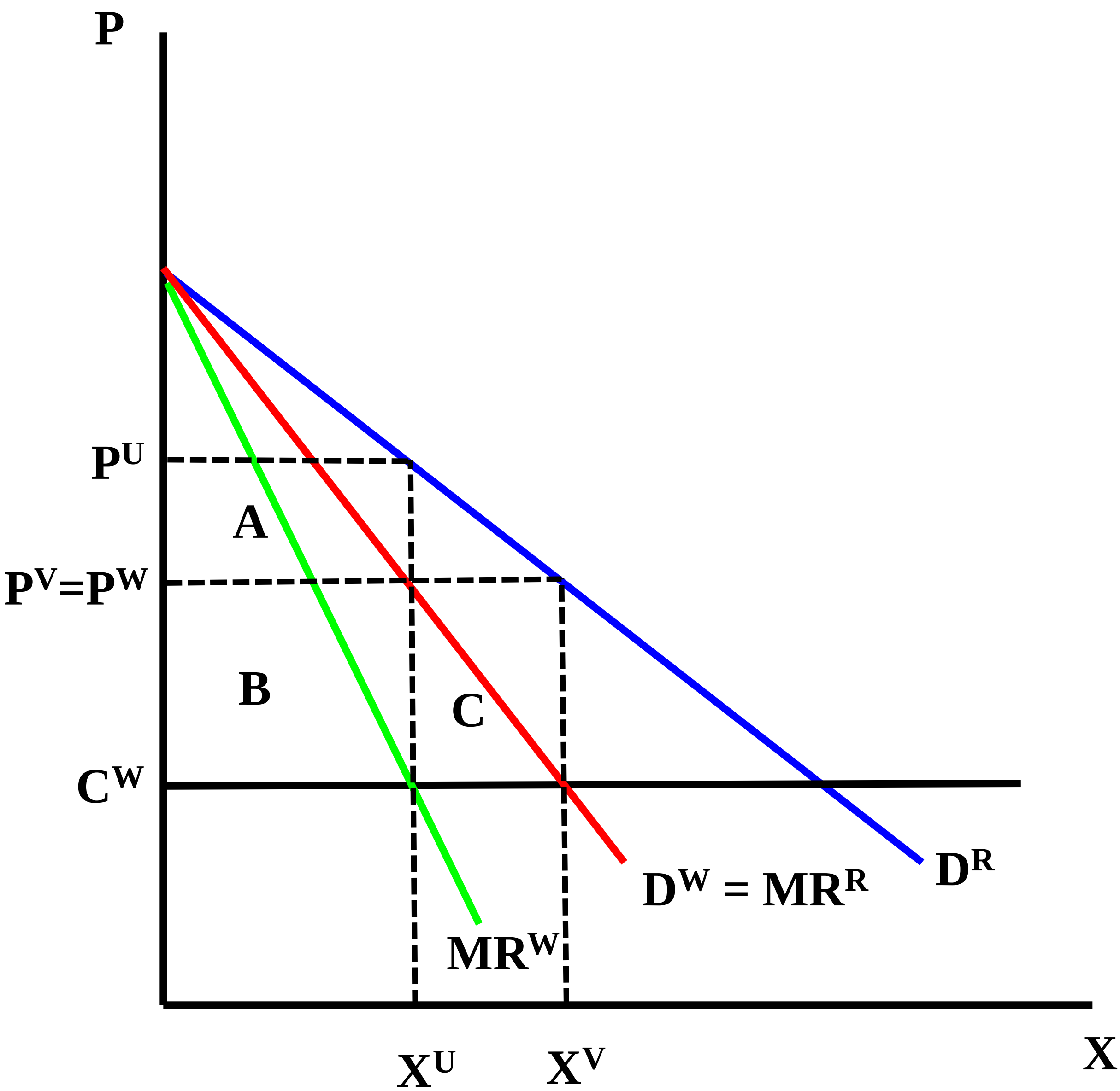
- **Manufacturers often use “vertical restraints” in dealing with retailers:**
  - **Resale price maintenance**
  - **Exclusive dealing**
  - **Exclusive territories**
  - **Full-line forcing**
- **Contractual provisions used to affect behavior of retailers**
- **Historically treated as “per se” illegal 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



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)**

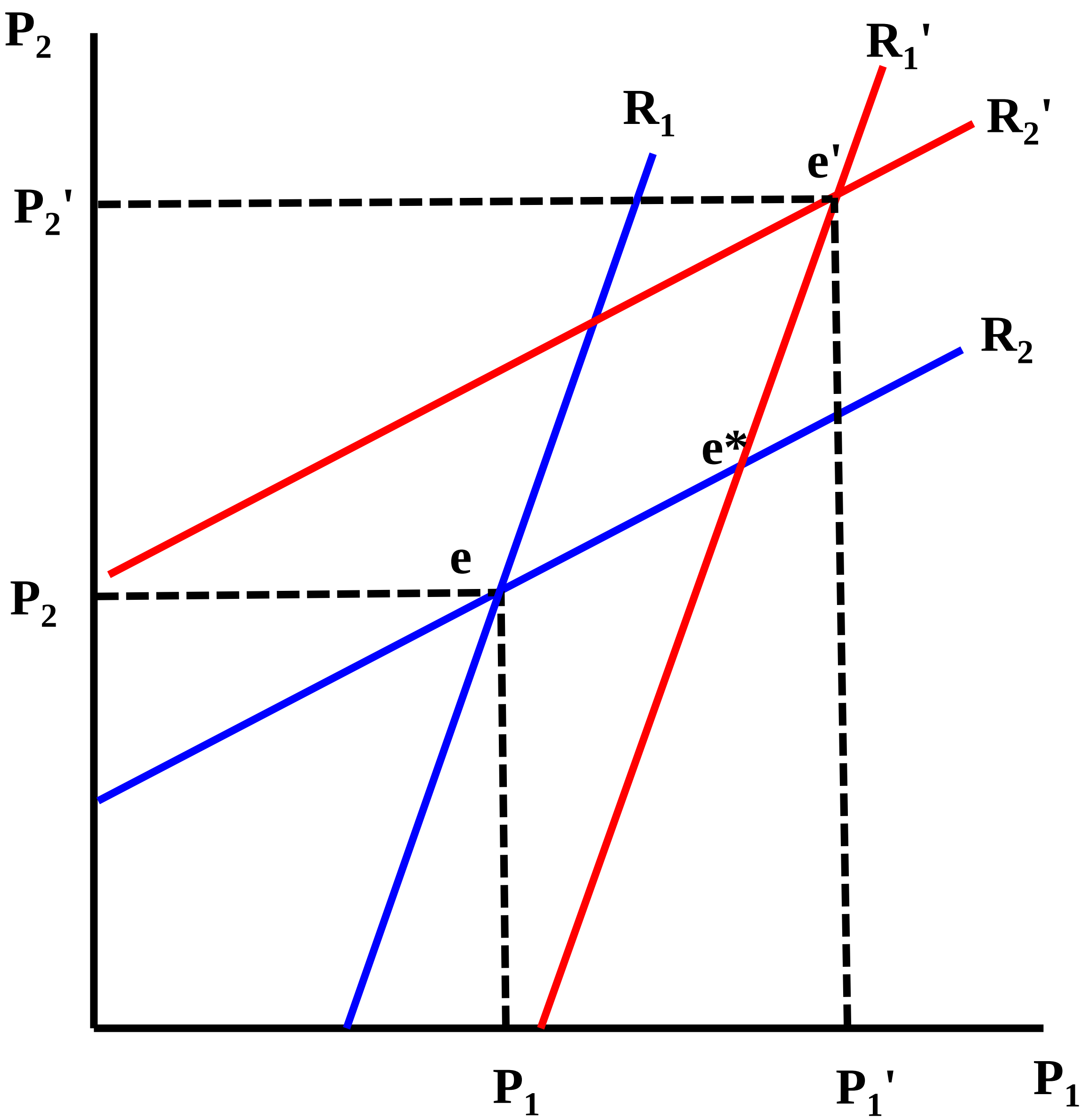
- **Suppose each manufacturer initially sets wholesale price equal to its marginal cost, franchise fee being set to zero**

- **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

- **Slotting allowances have proved controversial – twice examined by US Federal Trade Commission (2001, 2003)**

- **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**