제 11 장 가격설정전략 **Pricing Strategies for Firms with** Market Power



Standard Pricing and Profits for Firms with Market Power



An Algebraic Example

- P = 10 2Q (역수요함수)
- C(Q) = 2Q (총비용함수)
- If the firm must charge a single price to all consumers, the profit-maximizing price is obtained by setting MR = MC (한계수익=한계비용).

•
$$10 - 4Q = 2$$
, so $Q^* = 2$.

- $P^* = 10 2(2) = 6.$
- Profits = (6)(2) 2(2) =\$8.

Markup Rule (가격할증의 기준)

- Suppose the elasticity of demand for the firm's product is E_F .
- $MR = P[1 + E_F] / E_F$. (Amarozo-Robinson)
- Setting MR = MC and simplifying yields this simple pricing formula:

 $P = [E_F / (1 + E_F)] \times MC.$

- The optimal price is a simple markup over relevant costs!
 - ^q More elastic the demand, lower markup.
 - ^q Less elastic the demand, higher markup.

1급 가격차별

First-Degree or Perfect Price Discrimination

- Practice of charging each consumer the maximum amount s/he will pay for each incremental unit.
- Permits a firm to extract all surplus from consumers. 현실적으로 불가능



* Assuming no fixed costs

Caveats:

- In practice, transactions costs and information constraints make this difficult to implement perfectly (but car dealers and some professionals come close).
- Price discrimination won't work if consumers can resell the good.

2급 가격차별 Second-Degree Price Discrimination

- The practice of posting a discrete schedule of declining prices for different quantities.
- Eliminates the information constraint present in first-degree price discrimination.
- Example: Electric utilities



3급 가격차별 Third-Degree Price Discrimination

- The practice of charging different groups of consumers different prices for the same product.
- Group must have observable characteristics for third-degree price discrimination to work.
- Examples include student discounts, senior citizen's discounts, regional & international pricing.
- No Transfer or Resale will be allowed across groups.

Implementing Third-Degree Price Discrimination

- Suppose the total demand for a product is comprised of two groups with different elasticities, $E_1 < E_2$.
- Notice that group 1 is more price sensitive than group 2.
- Profit-maximizing prices?
- $P_1 = [E_1/(1+E_1)] \times MC$
- $P_2 = [E_2/(1+E_2)] \times MC$

2부 가격설정 Two-Part Pricing

- When it isn't feasible to charge different prices for different units sold, but demand information is known, two-part pricing may permit you to extract all surplus from consumers.
- Two-part pricing consists of a fixed fee and a per unit charge.
 - ^q Example: Athletic club memberships.
 - g Example: Amusement or Theme Parks

How Two-Part Pricing Works



Block Pricing

- The practice of packaging multiple units of an identical product together and selling them as one package.
- Examples
 - ^q Paper.
 - g Six-packs of soda.
 - ^q Different sized of cans of green beans.

Commodity Bundling or Tying

- The practice of bundling two or more products together and charging one price for the bundle.
- Examples
 - ^q Vacation packages.
 - ^q Computers and software.
 - ^q Film and developing.

Peak-Load Pricing

- When demand during peak times is higher than the capacity of the firm, the firm should engage in *peak-load pricing*.
- Charge a higher price (P_H) during peak times (D_H).
- Charge a lower price (P_L) during off-peak times (D_L).



Cross-Subsidies

- Prices charged for one product are subsidized by the sale of another product.
- May be profitable when there are significant demand complementarities effects.
- Examples
 - ^q Browser and server software.
 - ^q Drinks and meals at restaurants.

Pricing in Markets with Intense Price Competition

- Price Matching
 - ^q Advertising a price and a promise to match any lower price offered by a competitor.
 - ^q No firm has an incentive to lower their prices.
 - ^q Each firm charges the monopoly price and shares the market.
- Randomized Pricing
 - ^q A strategy of constantly changing prices.
 - ^q Decreases consumers' incentive to shop around as they cannot learn from experience which firm charges the lowest price.
 - ^q Reduces the ability of rival firms to undercut a firm's prices.