EE481: Industrial Economics

Price discrimination (part 2: Advanced Topics in Pricing)

Dr. Wanwiphang Manachotphong

Department of Economics, Thammasat University

13 March 2019

Tie-in Sales

- Consumer can buy one good only by purchasing another good as well.
- Could be categorized as price discrimination because it enables firms to charge more from those who value the product(s) more.
  - Nepresso
  - Chang Beer & Sangsom Whiskey
  - Ex: Samgsom + Chang Beer.
- Under many competition laws this is illegal.

General Reasons for Tie-in Sales

- Efficiency (cost-saving, cost sharing)
- Evade Regulations (try to get around price control)
- Secret Price Discounts
- Assure Quality
- Increase monopoly profit. (in this class, we focus more on this.)

Tie-in Sales as a Method of Price Discrimination

In practice tie-in sale is done through:

- package tie-in sale
- requirement tie-in sale

Tie-in works when

- Consumers cannot resale each of the tied-in products
- Consumers cannot purchase the product separately elsewhere

Types of Tie-in Sales

1. Independent demands case = the value a comsumer places on one product ***does not depend*** on the consumption of the other product.

- Both products monopolized - can increase profit
- Only one product monopolized - cannot increase profit

1. Interrelated demands case = the value a comsumer places on one product ***depends*** on the consumption of the other product.

- Both products monopolized - can increase profit
- Only one product monopolized - can increase profit

Both products monopolized (1)

- Suppose a movie thetre is a monopoly on two movies–A and B.
- There are two types of consumers–type 1 and type 2.
- Should it sell the movies separately or together? See examples

Both products monopolized (2)

Both products monopolized (3)

- If resale is possible in situation 1, would the consumers buy the movie bundle?
- No. This is because the equilibrium price in the resale market would be $____________ for movie A, and $____________ for movie B.
- If resale is NOT possible, situation 1 could increase the monopoly's profit because the two groups of consumers have different relative preferences between the two products.
  - requirements for bundling are 1) some market power, 2) resale no possible, 3) consumers' different relative preferences.

Mixed Bundling with Both Products Monopolized (1)

- Mixed bundling = the seller lets consumers choose between buying goods separately and buying good in a bundle.
    - An example of restaurant pricing
        - Individual pricing (a' la carte)
        - Pure bundling (buffet or set-menu)
        - Mixed bundling (consumers can choose between the 2 above)

Which pricing strategy is the best? First, the restaurant would have to see whether bundling is possible in their case.
(requirements for bundling are 1) some market power, 2) resale no possible, 3) consumers' different relative preferences)

Mixed Bundling with Both Products Monopolized (2)

- Suppose the restaurant sells only 2 products 1) Chicken Wings and 2) Coca Cola.

Mixed Bundling with Both Products Monopolized (3)

Mixed Bundling with Both Products Monopolized (4)

- Taking cost into account, your decision may change.

One Product Monopolized

- Suppose a monopoly only owns 1 product and is thinking whether it wants to tie-in another “competitive” product.
- Would this be profitable?
- Given that consumers’ demand for two products are independent, this would not be profitable.

Interrelated Demands

- In many cases demand for two products are interrelated.
- For related products, it is possible for monopoly to increase product from tie-in sales even if one of the product is "competitive".

Package Tie-ins with Interrelated Demands(1)

- In this case, suppose there are 2 substitute products Aluminium and Steel.
- We can Illustrate the relation between demand of the two products as

Package Tie-ins with Interrelated Demands(2)

- Using the Isocost - Isoquant graph, we can depict the situation as follow:

Package Tie-ins with Interrelated Demands(3)

If the demand for the monopoly's product is low compared to the demand for another related product, the monopoly can use tie-in to increase demand for monopoly's product.

Requirement Tie-ins with Interrelated Demands (1)

This type of tie-in enables the monopolist to achieve perfect price discrimination.

- In this case, suppose button-sewing machine and buttons are complementary products.

Requirement Tie-ins with Interrelated Demands (2)

- Sell buttons that only works with the machine and price each button at ____________ cents each.

Other methods of Nonlinear Pricing

1. Minimum quantities and quality discounts
2. Selection of price schedules
3. Premium for priority
4. Auctions

Reference and Further Reading I

Carlton, D.W. and J.M., Perloff.
Modern Industrial Organization. 4th Edition.
Pearson Addison Wesley Press, 2005.