# Principles of Economics Review Session

張耕齊

Keng-Chi Chang

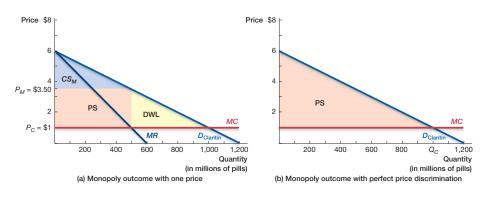
<r03323070@ntu.edu.tw>

2016.12.7

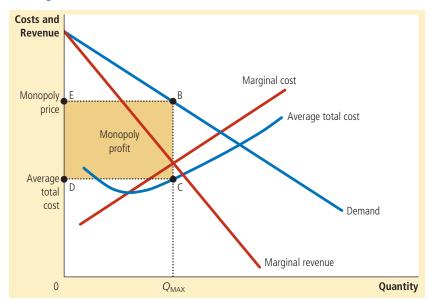
#### §12.6 Price Discrimination 差別取價

- Ways to restore some efficiency loss under monopoly?
- First-degree: Charge the maximum willingness to pay for each customer
  - This can fully restore social surplus, in an unequal way
  - Hard to achieve since you need to know many information
  - Ex. Panama Canal's pricing
- Second-degree: Charge based on quantity of purchase
  - Let those who has lower willingness to pay to self-select and buy at different quantity
  - ▶ Ex. Discount coupons, quantity discounts, 第二件六折
- Third-degree: Charge based on characteristics of customers
  - Some people may have lower willingness to pay, such as students
  - Ex. Student tickets, airline tickets, movie tickets

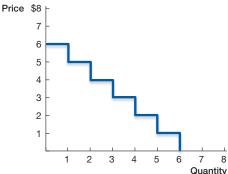
#### **First-degree Price Discrimination**



### **Monopolist's Profit**



**ALL 12-11.** Imagine that you arrive at an economics experiment with six other people and are told that you will simulate a market. You will be the only seller. The other five people will be assigned a dollar value that they will receive if they buy the good for any amount of money (so if a person's value is \$6, he will buy the good for any price less than \$6 and will be happy). You are also given the following demand curve and told that it represents the values that the "buyers" are assigned:



- a. If you are told that you can produce as many units as you like at a cost of \$2 per unit, what would your marginal cost curve look like? Add the marginal cost curve that you face as the monopolist to the graph.
- b. Draw the marginal revenue curve that you face as the monopolist, based on the demand curve given above.
- c. What price would you set and what quantity would you produce if you have to post one price at which everyone can purchase the good?
- d. Based on the price and quantity you selected in part c, what would consumer surplus be? What would producer surplus be? Is there a deadweight loss?
- e. Imagine that you are told that now you can have a discussion with each buyer privately to negotiate a price. Would you still charge everyone the same price? Explain your answer.
- f. Calculate the surplus and the deadweight loss for the scenario with perfect price discrimination.

## **2009 Multiple Choice Q5.** Price discrimination is a rational strategy for a profitmaximizing monopolist when

- A. The monopolist finds itself able to produce only limited quantities of output.
- B. Consumers are unable to be segmented into identifiable markets.
- C. The monopolist wishes to increase the deadweight loss that results from profit maximizing behavior.
- D. There is no opportunity for arbitrage across market segments.

**2015 True or False Q6.** If the customers of a monopolist could get together and bribe him to act like a competitor, then they could make both themselves and him better off.

**2015 True or False Q7.** If Hewlett Packard could require all HP laser jet printer owners to buy all of their toner cartridges directly from HP, it would charge monopoly prices for those toner cartridges.

**2015 True or False Q8.** A profit-maximizing monopolist whose firm was a source of negative externalities might produce exactly the socially optimal level of output.