Discrimination

Lecture 5

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Section 1

Definition

Definition

Definition (Discrimination)

Discrimination is offering different consumers different deals for the same product.

- prices
- time scale
- terms and conditions
- service levels
- commercial information about products, services, systems and processes.

Section 2

Price discrimination

Price discrimination

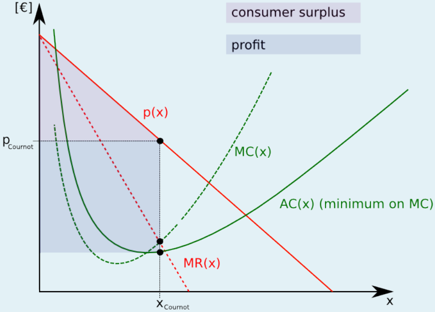
Prerequisite for price discrimination

The firm has to get signals from consumers indicating their willingness to pay. Examples:

- Airlines charge more for on last minute flights.
- Cinemas charge more for a movie in the evening than in the afternoon.
- Restaurants charge disproportionally for a single drink in comparison to a whole meal.

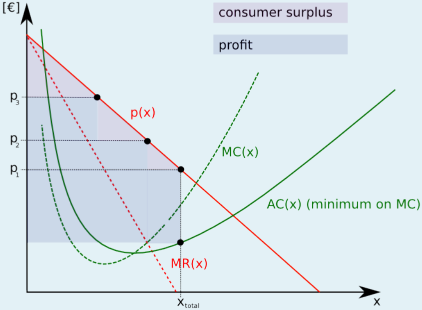
Price discrimination

Starting point: No price discrimination



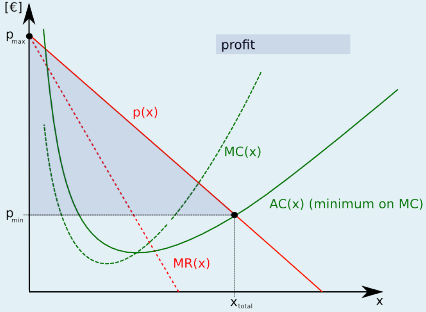
Price discrimination

Three different prices



Price discrimination

Perfect price discrimination



Section 3

Welfare effects

Welfare effects

Positive welfare effects

Positive welfare effects – static efficiency	
Condition	Prices can be differentiated according to the consumer's willingness to pay.
Conclusion	Some consumers will be served who would not be served if there was no price differentiation.

Welfare effects

Negative welfare effects

Negative welfare effects – static efficiency	
Condition	Prices can be differentiated according to the consumer's willingness to pay.
Conclusion	Some consumers have to pay more than without price price differentiation. $\Rightarrow$ Reduction of consumer surplus. In extreme: If every consumer is charged according to its individual willingness to pay, consumer surplus will be zero.

Welfare effects

Negative welfare effects

Negative welfare effects – dynamic efficiency	
Conditions	(1) Vertically integrated firm F discriminates on the wholesale level between its own retail branch and other wholesale customers. (2) F has SMP on wholesale market.
Conclusion	Distortion of competition on the retail level in favour of F's retail branch.

Welfare effects

Negative welfare effects

Negative welfare effects – dynamic efficiency	
Condition	Horizontally integrated firm applies discount on aggregate sales of monopolistic and competitive products $\Rightarrow$ Discrimination between customers who take both products and customers who are just interested in the competitive product
Conclusion	Leverage of market power from a monopolistic market to a competitive market.

Section 4

Incentives

Incentives

Decreasing the rivals' revenues

Conditions

- Monopoly: Only firm I provides product A.
- Competition: Firms I and C provide product B.

Incentives

Decreasing the rivals' revenues

Discrimination strategy (Barry Nalebuff)

I offers a discount on A if the customer buys its product B so that

$$
\begin{array}{ll}
 & R_I(\text{product A, with discount on A by } I) \\
+ & R_I(\text{product B, with discount on A by } I) \\
> & R_I(\text{product A, without discount on A by } I) \\
+ & R_I(\text{product B, without discount on A by } I)
\end{array}
$$

In other words: I is less bad to those customers on product A who buy I's overpriced product B.

Incentives to discriminate

Decreasing the rivals' revenues

Outcome

Potential impact on rival firm C:

$$\begin{array}{ll} & R_C(\text{product B, with discount on A by } I) \\ < & R_C(\text{product B, without discount on A by } I) \end{array}$$

C might have to leave the market, depending on the quantity of B it looses to I.

Incentives to discriminate

Decreasing the rivals' revenues

Example

Complementary relationship between inbound flight (A) and outbound flight (B).

- A small airline ALS offers on route DUS–LHR 1 inbound and outbound flight per day.
- A large airline ALL offers on route DUS–LHR 10 inbound and outbound flights per day.
- ALL will sell the bundle of inbound and outbound only at a marginally larger price than just stand-alone inbound flight.
- ALS does not stand a chance.