EE481: Industrial Economics

Price Discrimination (Extra on Two Two-Part Tariff)

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The low-type usually get most of their surplus extracted

- Suppose there are 2 types of consumers.
  - Type 1 (Low-type) : has a low valuation of the product
  - Type 2 (High-type) : has a high valuation of the product
- First, Suppose the company design a two-part tariff that extracts all surplus from the low-type

If only 1 two-part tariff is offered the high-type buys more q

- Suppose this company offers only 1 two-part tariff (call tariff a) the high-type would maximize their utility by choosing at point "B"
  - Type 1 chooses $\{E_1^a, q_1^a\}$
  - Type 2 chooses $\{E_2^a, q_2^a\}$

Type 2 has more surplus for firm to extract

- Let's suppose firm would like to extract more surplus from Type 2.
- This can be done by moving the expenditure outlay for type 2 up and up. (Assume Parallel Shifts for now)
- As long as Type 2's indifference curve is below point "A", Type 2 consumer would not choose point "A".
- Firm now offers ONLY "A" and "D", or package $\{E_1^a, q_1^a\}$ and $\{E_2^d, q_2^d\}$.
- You can check that type 1 would choose $\{E_1^a, q_1^a\}$ and type 2 would choose $\{E_2^d, q_2^d\}$.

Firm can maximize expenditure from type 2

- Firm can earn even more expenditure from type 2 if it adjusts the expenditure outlay (to achieve the highest that just touches type 2's indifference curve).
- This usually results in a higher fixed fee and a lower variable fee
- Firm now offers "A" and "C" only, or package $\{E_1^a, q_1^a\}$ and $\{E_2^c, q_2^c\}$.

Can this be done in the real world?

- In the real world, it is hardly possible to figure out what would be the right E and q for each type, let alone there are usually more than 2 types of customers.
- A store membership card that you pay a fixed fee, but get some % discount is a kind of two two-part tariff.