Price Discrimination

Definitions

Price Discrimination = When a firm sells the same good at different prices not due to differences in production cost.
First Degree Price Discrimination = When a firm charges each consumer the maximum price that he is willing to pay for each unit bought.
Second Degree Price Discrimination = When a firm charges different prices for different blocks of the same good according to how much they purchase.
Third Degree Price Discrimination = When a firm divides consumers into different groups and charges a different price to consumers in different groups for reasons not arising from cost differences.

Criteria:

1. Ability to set prices
    - Sufficient market power + Control over market supply
    - Downward sloping DD curve
    - Few close substitutes
2. Able to segregate the market + Resale not possible
    - Easy: Goods that consumer has to be present to consume
    - Difficult: Goods that consumer doesn't have to be present to consume
3. Each sub-market must have a different DD conditions - PED + Size of DD

Discuss whether _____ is a case of price discrimination.

1. Define price discrimination
2. Identify type of price discrimination
3. Thesis:
    - Same good
    - Criteria met
        - Ability to set prices
        - Ability to segregate the market into sub-markets with different PED
    - No cost differences
        - More complex: Differences in cost but not enough to explain differences in price
4. Anti-thesis:
    - Goods are not the same ⇒ DD is different ⇒ Higher pricing due to selling different good at higher price, not price discrimination
        - e.g. Front row seats vs Back row seats → Different experience
        - Conditions of sale
        - Quality of good
        - Service
    - There are differences in cost
5. Synthesis

- e.g. Not a simple case of pure price discrimination

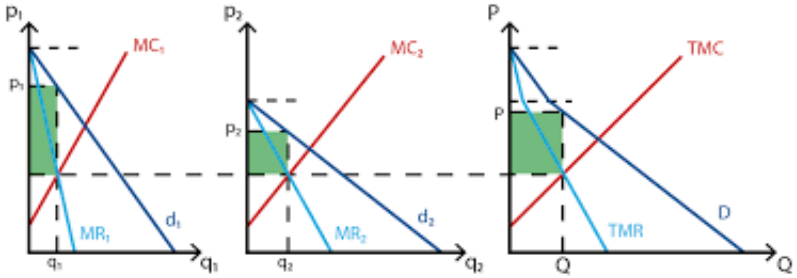
First Degree Price Discrimination (Perfect Price Discrimination) = Charge each consumer the maximum price that he is willing and able to pay for each unit bought

- Effects:
  - Firm captures all of the consumer surplus
  - Dd curve becomes the new MR curve, AC curve also increases
- Difficulties in achieving first degree price discrimination:
  1. Impractical to charge each and every customer a different price for each and every unit
  2. Customers will not usually reveal the maximum price that he is willing to pay for each unit of the good
- Closest e.g. Auction/Markets

Second Degree Price Discrimination (Block Pricing) = Charge different prices for different blocks of the same good according to how much they purchase.

- i.e. Uniform price for a specific range of quantities which decreases for an additional batch
- Same price structure applied to every consumer
- Price varies by blocks of units purchased
- e.g. In some countries, electricity companies charge a higher price for the first few kilowatts as first few kilowatts used on necessities which are relatively price inelastic

Third Degree Price Discrimination = Charges a different price to different consumers for reasons not arising from cost differences



- Due to difference in demand for different consumers
- Total output such that for each group, MR = MC, in order to maximise profits
- Total output divided such $MR_A = MR_B$ in order to maximise profits
  - If $MR_A > MR_B$, firm could lower prices for A and raise prices for B to shift more output to A and hence, maximise profits
- Higher price charged for relatively price inelastic sub-market
- Example: Peak Load Pricing
  - Prices during peak periods are higher than prices during off-peak periods

    - During peak periods, demand is less price elastic ⇒ higher prices
    - Anti-thesis:
        - Higher charges may be due to higher marginal costs during peak times
            - Fixed factors means that marginal cost rises as output expands
            - Diminishing returns to variable factors
            - Using additional equipment at higher operating costs
        - e.g. Opening more counters/Hiring extra staff

Costs of Price Discrimination

- Loss of Consumer Surplus
    - However, from society's point of view, merely a transfer of surplus from consumers to producers
    - For first degree price discrimination, P=MC => Allocatively efficient
- Allocatively inefficient (Other than first degree price discrimination)
    - Monopoly restricts output to set high price
    - Under-production of the good => Deadweight welfare loss

Benefits of Price Discrimination

- Higher output
- Higher profits may facilitate ability to conduct R&D
    - However, firms may not have the incentive to conduct R&D
- Consumers from lower income groups able to consume a good/service they would otherwise not be able to afford
- Provision of goods that would otherwise not be produced (For first degree price discrimination)
    - In industries where AC curve is higher than Dd curve, good would not be produced if the firm charges a uniform price for all units of the good sold
    - However, with first degree price discrimination, total revenue increases to a point where TR > TC