UC Berkeley Economics 121 Prof Joseph Farrell

Lecture 16 – March 16, 2006

Efficiency aspects of price discrimination

Ramsey Pricing

- How do you tax several different goods to raise the most money with the least distortion?
- Mark up each good in proportion to  $1/\epsilon$
- Intuition:
  - Inefficiency from p>mc arises from demand shift (too little consumed)
  - Low elasticity consumers: raising price won't do much
  - High elasticity consumers: don't mark up prices very much
- Refer to graph drawn in class
- See class notes for derivation of Ramsey prices
- To maximize a weighted combination of profits and welfare, markups should be inversely proportional to elasticity
- If we consider two groups of consumers, rather than two different goods, this is price discrimination
- PD math is similar to math of maximizing welfare with a breakeven constraint
- PD might not be so evil
  - Helps firms in a way that is less harmful to consumers than no PD
  - (Positive view) Maybe even a positive impact on consumer surplus

## Example

- Two markets (maybe 2 countries in which a drug is sold)
- Big market, inelastic demand (U.S.)
- Small market, elastic demand/low wtp
- PD: High price in U.S., low price in  $2^{nd}$  market
- No PD: 2<sup>nd</sup> market doesn't get served at all
- Effect on CS? Higher with PD (in this example)
- Positive view of PD: Those willing to pay more do

Dark/Seamy Side of PD

- So far discussed monopoly PD (Ramsey-like prices)
- Oligopoly PD
  - If group with inelastic demand is better at comparison shopping, may get lower markups
  - Markups based on exposure to competition
- Potential damage to efficient market organization
  - IBM punchcard example
  - PC printers example
    - Hard for smaller competitors to take hold
    - Are printer makers the best people to produce cartridges?

- Problems with PD via Self-Selection
  - Pricing not related to production costs
  - Potential for product to be deliberately damaged in the name of PD
    Computer chips, broadband market

Read Ch 11, up to p 379