Price Discrimination & Competition: Implications for Antitrust

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Price Discrimination is a Loaded Phrase in Antitrust

- Price discrimination implies "bad" things will happen.
- Logic:
  - "Competitive" markets require P=MC.
  - Price discrimination implies P>MC
  - Hence, price discrimination implies that markets are not "competitive."

Price Discrimination v. Differential Pricing

- Price differences do not generally raise antitrust concerns
  - E.g., movie theaters
- Price differences do not necessarily imply price discrimination
  - E.g., revenue management (cruise lines)

Antitrust Scholars on Price Discrimination

- “Persistent discrimination is very good evidence of monopoly because it is inconsistent with a competitive market; it implies that some consumers are paying more than the cost of serving them, a situation that would disappear with competition.” (Posner, *Antitrust Law: An Economic Perspective*)

Economists on Price Discrimination, I

- "...systematic discrimination may bolster the monopoly power of already powerful firms and facilitate adherence to collusive price structures." (Scherer and Ross, *Industrial Market Structure and Economic Performance*)

Most of What You Thought You Knew is Wrong

- All of these “insights” come from comparing monopoly to perfect competition
- What happens when you compare oligopoly with discrimination to oligopoly without discrimination?
- None of these insights survive

Monopoly vs. Oligopoly Price Discrimination

- Price discrimination allows <u>monopolists</u> to extract more consumer surplus
  - But also expands market
  - Consumer welfare effects ambiguous
    - e.g., drugs in Northern vs. Southern Europe
- Price discrimination intensifies competition among <u>oligopolists</u> (in “typical” cases).
  - Reduces profit
  - Raises consumer welfare

Why does Price Discrimination Intensify Competition?

- With <u>uniform price</u>, firms compete only for "marginal" customers
  - At edge of market area; or
  - Without strong brand loyalty
- With <u>price discrimination</u>, firms compete for all customers, by offering discounts
  - Extends market area closer to rival; or
  - Allows competition for consumers loyal to rival's brand
- Not a new insight (Scherer, 1970 edition)

Oligopolists would rather NOT Price Discriminate

- The ability to price discriminate puts them in Prisoners' Dilemma
  - Individual incentive to discriminate—it always raises profit
  - But if rivals discriminate, everyone is worse off.

So what does this mean for antitrust?

- Cannot appeal to discrimination without careful analysis of consequences.
  - Example: how does presence of discrimination affect merger analysis?
- We dispel four widely circulated Myths about the effects of price discrimination.

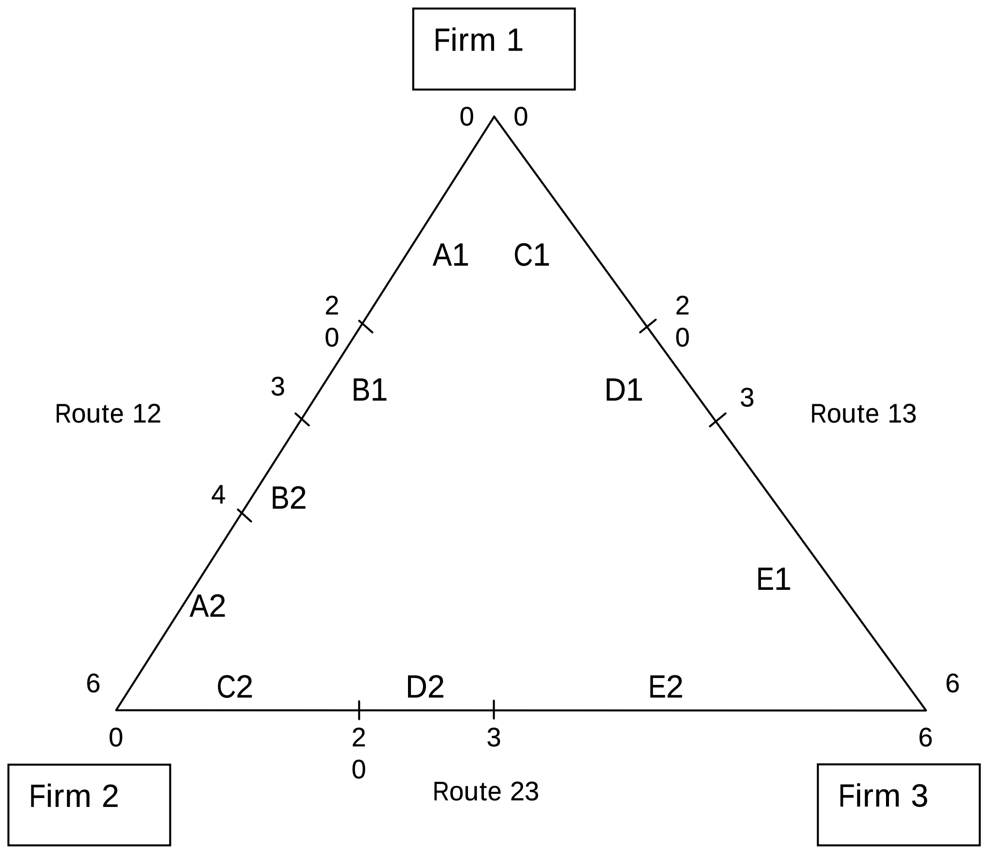
Price Discrimination Under Spatial Competition --- A Simple Example

- Three supermarkets located around a triangular city connected by three 6-mile roads.
- Consumers are distributed uniformly along the roads and each purchase one unit.
- Travel costs t=$1 per mile.
- The marginal cost of the product is c=$2.
- Consumer valuations are high enough relative to production and travel costs that the most distant consumers will buy to good.

Uniform Pricing vs. Price Discrimination

Location	Uniform Price*	Price Disc.*
A1	$9.00	$7.00
B1	$10.50	$5.50

*Price are “full” prices of customer in the middle of each region



When Does Price Discrimination Intensify Competition?

- Customers do NOT agree on which brand is preferred
  - Arises naturally in geographic differentiation
  - And in discrete choice models
  - Common, if not typical case
- Analogy to product loyalties
  - Customers differ by brand preference.

3-to-2 Merger with Uniform Pricing

- If Firms 1 and 2 merge.
- Prices rise via unilateral effects.
- Merging firm raises price from $8 to $12.
- Rival raises price from $8 to $10.
- Some customers drive further to purchase products from further away
  - “cross-hauling”

3-to-2 Merger with Price Discrimination

- Competition on routes 13 and 23 doesn't change.
- Thus, two-thirds of the customers are unaffected!
- Competition on Route 12 is affected.
- No inefficient "cross-hauling"

Location	Pre-merger price*	Post-merger price*	% Change
A1	$7	$9	29%
B1	$5.50	$10.50	91%
C1	$7	$7	0%
D1	$5.50	$5.50	0%
E1	$6.50	$6.50	0%
Average	$6.50	$7.50	16%

*Price are "full" prices of customer in the middle of each region

Comparing Merger Effects With vs. Without Price Discrimination

Location	% Price Change with Uniform Pricing	% Price Change with Price Discrimination
A1	44%	29%
B1	38%	91%
C1	44%	0%
D1	38%	0%
E1	21%	0%
Average	34%	16%

- Conclusion: In this example, on average, price discrimination mitigates merger effects.

More Realistic Examples

- The result that price discrimination mitigates merger effects in the example does not hold in all environments.
- In more realistic environments, the implications of price discrimination for mergers are more complex.

Impact of Price Discrimination on Merger Effects

- Price discrimination causes market area of merging parties and competitors to widen.
- Impact
  - Mitigates merger effects if it brings non-merging firms into closer competition
  - Amplifies them, if it brings merging firms into closer competition.

Myths About Price Discrimination

- Myth 1: Price discrimination does not arise in intensely competitive markets.
- Myth 2: Price discrimination indicates the presence of significant market power.
- Myth 3: Price discrimination almost always hurts some consumers
- Myth 4: Imperfect Price discrimination is socially inefficient.

Myths dispelled, Price discrimination:

- Can and does occur in markets with intense (but not perfect) competition...Myth 1 👎
- Is not a good indicator of significant market power...Myth 2 👎
- Can benefit all consumers...Myth 3 👎
- May improve efficiency...Myth 4 👎

Conclusions

- Does price discrimination make markets more competitive?
  - Answer: It can.
- Does price discrimination amplify or mitigate merger effects?
  - Mitigates merger effects if it brings non-merging firms into closer competition
  - Amplifies them, if it brings merging firms into closer competition.