

AEC 841--MODULE 3C

THE I-O MODEL--CONDUCT

- I. Cf. Bain's structuralist perspective with Scherer's behavioralist perspective on conduct.
- II. Definitions of conduct:
 - A. Bain: patterns of behavior that enterprises follow in adopting to the markets in which they sell. As in most of I-O, the emphasis is on oligopoly conditions, where economic models are not clearly predictive about what conduct will be.
 - B. Caves: Conduct refers to a firm's policies regarding the product market and moves by its rivals. It includes:
 1. Price setting
 2. Non-price competition--e.g., terms of sale (credit, etc.)
 3. Discouraging entrants and/or coercing rivals.
 4. Product quality--strategic and tactical decisions
- III. Pricing Practices of Oligopolies - alternative pricing strategies
 - A. Key characteristic of oligopoly pricing is *conjectural variation*--i.e., the recognition by members of an oligopoly that the outcomes of their strategies are critically dependent on how their rivals react to their actions. I.e., perceived mutual interdependence.
 - B. *Possible pricing behaviors under oligopoly* [The following tend to be the tactics of pure oligopolies, which want to avoid price competition (their main way of competing). Differentiated oligopolies rely more on non-price competition.]:

1. **Joint Profit Maximization**

a. **Cartels**

- (1) Involve market sharing--3 elements:
 - (a) Often dividing markets into separate exclusive territories for each member of the cartel
 - (b) joint price setting to maximize total revenues
 - (c) allocation of production quotas to restrict output to the levels necessary to reach the pricing goal.
 - (d) May include explicit rules on who will submit low bids for public procurement (e.g., electrical company price fixing of 1950s and 1960s).
- (2) E.g., OPEC--Problems of stability of cartels and incentives to cheat, especially when cost structures differ among members.
- (3) In U.S., anti-trust laws make most cartels illegal. This is not so in some other countries (e.g., parts of Europe), which can lead to conflicts in international trade.

b. **Price leadership models**

- (1) *Dominant firm*--largest, most powerful firm sets prices, which other firms follow. This firm may have the lowest

cost in the industry, and usually has the power to discipline other firms into following its lead.

(2) *Barometric pricing*--One firm, not necessarily the largest, sets price that other firms follow. This is a firm that the rivals recognize as a trustworthy, competent leader that will set prices acceptable to the industry.

c. **Tacit Coordination**--spontaneous coordination, based on the desire to avoid aggressive behavior toward rivals--live and let live attitude.

2. **Pricing SOP's**--Rules of thumb for pricing that evolve in the industry--

e.g.,

a. standard mark-ups--e.g., in food distribution.

b. Manufacturers' suggested retail prices--note that in U.S., it is illegal for manufacturers to dictate retail prices

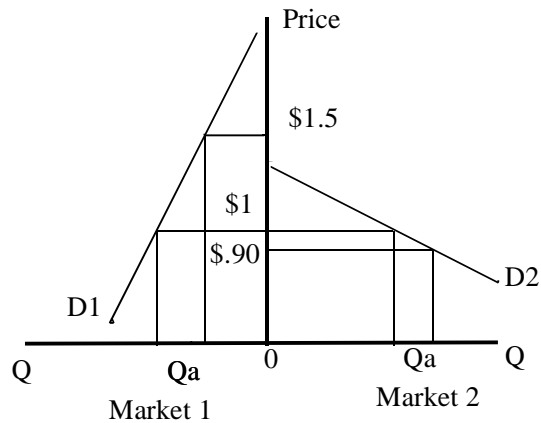
3. **Price discrimination**

a. Maximizing revenue by segmenting markets and charging different prices in different markets based on different willingness to pay in the different markets (as manifested by varying price elasticities of demand)

b. The principle--maximize total sales revenue by pricing essentially

the same commodity at different levels in different sub-segments of the market. The price differences are not based on differences in costs.

- c. 3 Necessary conditions:
- (1) Some degree of market power, as manifested by the firm facing a downward-sloping demand curve.
 - (2) Differing elasticities of demand (slopes of demand curves) in different segments of the market
 - (3) Ability to separate the markets by some type of product differentiation and to prevent arbitrage across markets
 - (a) Geographically--e.g., domestic vs. export markets
 - (b) Age of buyer (e.g., theater tickets)
 - (c) Restrictions on resale of commodity (e.g., restrictions on re-constituted milk in U.S.)



- d. Shift Q_a from Market I to Market II. Charge \$1.50 in Market I and \$.90 in Market II. Continue shifting quantities from Market I to Market II until $MR_I = MR_{II}$.
- e. Key idea is that with downward sloping demand curves and differing elasticities, equating prices across markets does not equate MR s and hence does not maximize prices.
- f. Examples:
 - (1) Canned fruits and vegetables--between private labels and nationally advertised brands
 - (2) Milk market--between fresh milk and manufacturing milk--powder, cheese, butter
 - (3) Walnuts and citrus

- (4) Beer--local vs. premium brands
- g. Incentive to price discriminate when one needs to cover fixed costs, and some markets face stiff competition and some do not (e.g., airlines)
- h. May be socially useful if that is the only way in which one can extract enough to pay for a socially useful good. Act as a discriminating monopolist--e.g., price discrimination based on type of shoes one wore to pay for canal bridges in the Netherlands.
- i. May also be consistent with equity goals--e.g., charging the poor less for goods--for example:
 - (1) Sliding scales for medical service, based on ability to pay
 - (2) Forced delivery of minimum foodgrain quota for fair price shops (India)

4. **Aggressive tactics**

- a. **Cross-subsidization**--Subsidizing one product with receipts from another to gain competitive advantage or to establish a market niche. Can take place:
 - (1) across product lines--e.g., Procter and Gamble
 - (2) geographically--e.g., by large food manufacturers or large retailers.

- (3) By conglomerate firms, across major business activities
(deep pockets)
- (4) Difficulty of establishing when this is taking place when
there are large joint costs.

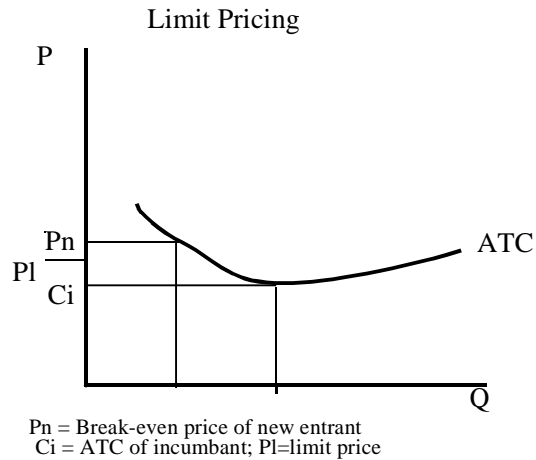
b. Predatory pricing and exclusionary (coercive) strategies.

- (1) Purposes
 - (a) To gain advantage over, weaken, control, or
eliminate competitors
 - (b) To discourage or prevent entry of new competitors
- (2) Many of these tactics are illegal in the U.S.
- (3) Forms of Predatory and exclusionary tactics
 - (a) Predatory price cutting
 - i) Selective price discrimination among
geographic areas
 - ii) Cross-subsidization by large firms--e.g.,
national food chains
 - iii) Discriminatory pricing by manufacturers or
wholesalers--e.g., offering special deals to
large buyers.
 - (b) Legal restrictions on discriminatory pricing:

- i) In U.S., Robinson-Patman Act requires equal treatment. Price differences must be justifiable on cost and return basis.
 - ii) Some states have laws prohibiting selling below cost.
 - iii) U.S. has anti-dumping statutes prohibiting importers from selling below cost.

Conceptual problem of establishing what is the relevant cost--MC or AC. Economic theory argues for MC pricing; protectionist aim is AC at minimum.
- (c) General price wars, which are not illegal. E.g.,
- i) A & P during the early 1970s
 - ii) Milk price wars of 1930s and 1940s.

- c. **Limit pricing**--pricing at level to achieve profits but just low enough to discourage new entrants--i.e., established firms can cover its ATC and still make profit, but new entrant can't cover start-up cost and initial higher ATC due to smaller scale without substantial losses initially.



IV. **Product Strategies**--Deal with non-price competition, which are often preferred by firms to price competition because it is often not as easy to counter non-price competition

A. Product differentiation

1. Advertising and promotion --creation of perceived differences
 - a. Huge debate about social value of advertising--e.g., informational vs. persuasive.
 - b. Question of whether much of advertising is defensive--i.e., simply

maintains current market share vs. increasing total demand for overall commodity.

- c. Broader social impact of promotion of consumerism

2. Market Segmentation

- a. Price discrimination
- b. Creation of value added--example, Arm and Hammer Baking Soda
 - (1) Brush your teeth
 - (2) Refrigerator
 - (3) Cat box freshener
 - (4) New products
 - (a) Laundry detergent
 - (b) Toothpaste
 - (c) Carpet freshener

B. Vertical (market channel) activities

- a. Vertical integration to gain control over supply--e.g., backward vertical integration by food chains as a means of exerting market power on suppliers.
- b. Monopolization of distribution outlets (franchising systems).
- c. Tying arrangements
 - (1) The tying-in sale contract--agree to buy certain items in

order to get others in short supply--Common in periods of short supply combined with price controls--e.g., U.S. after WW II.

- (2) Full-supply contracts--requires distributors to buy all goods from a single distributor. Can be legal in franchising arrangements.
- (3) Note change in US court's rulings on these vertical restraints since 1973.
 - (a) Prior to 1973, courts tended to rule such arrangements as *per se* illegal.
 - (b) Now courts apply "rule of reason" to determine if such arrangements are necessary to induce investment in specialized equipment, etc.
 - i) Williamsonian argument about potential free riding if no tying arrangement.
 - ii) Key argument is whether potential decrease in intra-brand competition is offset by increased inter-brand competition brought about by greater investment in such franchises.

(4) "Fair trade" rules that allowed manufacturers to set retail prices--now illegal in U.S.

d. Bribes, kick-backs, extortion, crime and violence (e.g., Mafia--in mushroom industry).

V. Research and Development

A. Involves creation of real value, although some R & D may descend into development of trivial differences to promote merchandising of product.

B. Examples:

1. Microwave foods. Now over 90% of US households have microwave ovens.

2. Ready-to-eat gourmet foods sold in supermarkets

C. Most oligopolies use this strategy, but not food companies very much in U.S. They have tended to lay off R & D staff.

D. Conclusion--R & D is generally pro-competitive, but have to look at type of innovation.

E. Policy question--How do you facilitate it?

1. Do you need some oligopoly power to foster and finance this?

2. In most countries, gov't grants potential monopoly rights to foster innovation (patent system).

3. See Scherer for discussion of role of small vs. larger firms as innovators in

industries and the role of industry concentration in promoting innovation.

4. Impact of licensing and other rules on product definition that may hinder innovation--e.g., filled milk.

VI. Legal Tactics--Legal actions to gain competitive advantage.

- A. Patent infringement suits (Defending consumer franchise--e.g., Coke, aspirin)
- B. Attempts to get use rights to new technology to establish and defend some degree of monopoly power.
- C. Assistance to regulatory agencies against competitors--e.g., Heinz and Campbell's dispute when Heinz was trying to enter the branded label soup business to compete with Campbell's
 1. Campbell's engaged in predatory pricing
 2. Heinz found out about Campbell's using marbles in soup to make it look more hearty--reported it to FTC
 3. Campbell's retaliated, systematically bought Heinz catsup until it found one with a mold in it, reported it to the FDA, prompting a recall.
- D. Corporate blackmail--e.g., playing one state or locality off against another for tax abatements and other concessions.
- E. Size and resources of the firm are a critical factor here

VII. Political actions--lobbying

- A. Often involves collective action by groups within the industry--firms, unions, trade

groups, co-ops.

B. Aimed at:

1. Changing the rules under which the market operates--e.g., **product**

identity standards:

a. Kraft and low-fat cheese--what can legally be called cheese and low-fat cheese--current battle.

b. Lansing case of orange juice adulteration

2. **Market Definition**--e.g., defense contractors, who approach buyer (gov't) to get product defined in a way that only they can supply it.

VIII. Public relations--media management

A. Corporate image development

B. Aimed at helping define the policy agenda and building support for the industry or firm's position in upcoming political battles--e.g., Philip Morris adds celebrating the 200th Anniversary of the Bill of Rights.

IX. Conglomerate Conduct

A. Cross-subsidization--deep-pocket behavior--discussed earlier

B. Entry foreclosure through control of key inputs or outputs

C. Conglomerate forbearance--"Live and let live"--i.e., lethargic competition and the "quiet life."

D. Reciprocity--"I'll scratch your back if you scratch mine." Leveraged buy-outs have

constrained C and D.

- X. Conduct is important insofar as it affects performance, where the major conceptual battles in I-O lay, although legal battles usually involve conduct.