Chapter 13: Predatory Conduct: Recent Developments

Learning Objectives:

Students should learn to:

1. Differentiate predatory conduct, predatory pricing, and limit pricing.

2. Compare the potential returns from predation and from merger and analyze the incentives for particular types of strategies in different markets.

3. Expand the model to limit pricing to cases where the entrant does not know the cost structure of the incumbent and makes decisions based on expected profits.

4. Discuss the role of contracts in impeding entry into a market.

    a.   Two period contracts as exemplified by the Aghion and Bolton model

    b.   Tying contracts as a way to extend monopoly power to related markets

5. Discuss and critique common rules suggested for determining predatory conduct:

    a.   (ir)rationality of predatory pricing for most firms and the importance of competitive skill

    b.   Areeda and Turner and below marginal cost pricing

    c.   Williamson and output expansion

    d.   Ordover and Willig, market structure and dependence of profitability on existence or non-existence of rival in the market

6. Understand that entry deterrence may involve under-investing as well as over-investing depending on the nature of the strategic interaction. Gain an introduction to regression with limited dependent variables.

Suggested Lecture Outline:

Spend two fifty-minute long lectures on this chapter.

Lecture 1:

1. Predatory Pricing

2. Potential Returns from Predation and Mergers

3. Role of contracts in impeding entry into a market

4. Rationality / irrationality of predatory pricing

Lecture 2:

1. Limit pricing when the entrant does not know the cost structure of the incumbent.

2. Numerical problems / examples.

3. Public Policy towards predatory behavior.

4. Testing for predation: Ellison and Ellison (2005).

Suggestions for the Instructor:

1. In discussing historical examples of predatory pricing, acknowledge that the incumbent firm often had greater financial resources as compared to the entrant firms.

2. Be sure to discuss some of the problems with predatory pricing and mergers in connection with the historical cases. This is a good place to introduce the ideas of credible threats and the ability of potential victims to anticipate the actions of predators.

3. One way to help motivate the section on policy is to divide the class into small groups, have each of them discuss the pros and cons of one of the common rules used to determine if there is predatory pricing, have them come up with preferred rules of their own, and then make a small presentation to the class.

Solutions to the End of the Chapter Problems:

Problem 1:

In the first case, the bank will ask Newvel to payback $80 million in both states of nature. In the second case, the bank will ask Newvel to payback $120 million if Newvel's earnings are high and $40 million if Newvel's earnings are low.

Problem 2:

If the incumbent were a low cost one, it would behave as a low cost firm. Now, suppose that the incumbent is high cost, but it behaves as a low cost one. Then the entrant believes that there is a 25% chance that the incumbent is low cost and a 75% chance that the incumbent is high cost. Therefore, the entrant's expected profit from entering:

$$\pi^{Entrant} = \frac{3}{4}\pi^{Monopoly} - 1000 = \frac{3}{4}\frac{(100-25)^2}{4} - 1000 > 0$$

Since, $\pi^{Entrant} > 0$, the entrant will enter even if the incumbent behaves as a low cost firm. Therefore, a high cost incumbent firm cannot gain by pretending to be a low cost firm.

Problem 3:

The following contract between the buyer and the incumbent supplier will be attractive to the buyer and at the same time will strengthen the monopoly of the incumbent seller.

Contract: In the first period, the buyer agrees to make its second period purchase of the good from the incumbent supplier at a price of $125 with only one exception. The exception is that the buyer can instead make its second period purchase from the new entrant so long it pays the incumbent supplier a $50 breach-of-contract fee.

Problem 4:

It really depends on the output that the incumbent sells at $p = 74$. If the total quantity sold is more than $74/3 = 24.67$, then the incumbent is selling below marginal cost. Total variable costs for the incumbent are: $VC = 1.5q^2$. Hence, average variable cost is: $AVC = 1.5q$, which rises with q. If q is greater than $74/1.5$, i.e., if $q > 49.33$, = then the incumbent is selling below average variable cost if $p = 74$.. If the total quantity sold is between 24.67 and 49.33, then the incumbent is selling below marginal cost, but not violating Areeda-Turner rule when average variable cost is used as a proxy for marginal cost.