

Predatory pricing

Lecture 6

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Section 1

Definition

Definition

Definition (Predatory pricing)

1. Price is low, meaning
 - ▶ strict criterion: $P < MC$
 - ▶ weak criterion: $P < AC$
2. The price is intended either
 - ▶ to drive competitors out of the market, or
 - ▶ to deter market entry by potential rivals.

Section 2

Welfare effects

Welfare effects

Welfare effects of predatory pricing

- ▶ Initial low price (price war) is beneficial to consumers.
- ▶ If price increases due to lack of competition, consumers will lose.

Section 3

Credibility

Credibility

Is a price suitable to drive competitors out of the market or to deter market entry by potential rivals?

The chain store game helps to analyse.

Credibility

Chain store game – payoff matrix. Single-round game: Firm C has the 1st move, I makes the 2nd move

	C – market entry	C – no market entry
I – fight	(70;-10)	(90;0)
I – accommodate	(80;10)	(100;0)

Credibility

Nash equilibrium: No player can do better by unilaterally changing his or her strategy.

	C – market entry	C – no market entry
I – fight		
I – accommodate	Nash equilibrium	

In a single-round game, market entry will take place.

Credibility

Chain store game – finite number of rounds

The incumbent I can not credibly threat to lower prices ('fight') in response to market entry.

Proof by **reverse induction**:

- ▶ Assume there is a finite number n of rounds ('subgame').
- ▶ In the n -th round, I will accommodate anyway (subgame equilibrium, see payoff matrix)
- ▶ I cannot credibly threat in the $(n - 1)$ -th round to set low prices in the n -th round.
- ▶ Accordingly I will stick to the subgame equilibrium in the $(n - 1)$ -th round.

Credibility

Predatory pricing can work despite the chain store paradox.

- ▶ Infinite number of rounds.
- ▶ Incumbent I can bear more losses over more subgames than any rival firm C .
 - Does I have the resources to take losses?
 - Does C have the resources to take losses?
- ▶ Rival firms do not know I 's payoff matrix (they can only guess).
 - It might make sense I to invest in building a reputation.