Chain-Store Paradox

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The Chain Store Paradox

• Selten (1978) proposed a finitely repeated version of the Entry Game in which the incumbent is a monopolist with a chain of stores in 20 different locations.

• At each location, a single entrant (challenger) firm, indexed by \( f=1,2,...,20 \), decide to compete with the monopolist.

• The challengers make their decisions sequentially.

• Challenger 1 decides whether to enter or not at location 1, chain store decides to fight or accommodate, then challenger 2 decides to enter or not at location 2, the chain store, then decides to accommodate or fight......
Backward Induction

20th stage
19th stage

Incumbent

Enfrant

E
O
A

-1, -1
1, 2
0, 3
The Chain Store Paradox

• This game is very similar to finitely repeated game.
• Outcome using Backward Induction
What about Deterrence?

• The above solution not seem empirically plausible. Why?

• Under the proposed equilibrium, the incumbent earns: 2x20 =40. But can he do better? Say by fighting first 15, accommodating the last 5.

• The role of deterrence.

• If this strategy is common knowledge then the first 15 stay out and earn 0 each, while the incumbent earns 3x15+2x5=55>40.

• Why this paradox?
The Role of Reputation